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THE MUSEUM
of
FAR EASTERN ANTIQUITIES
(Östasiatiska Samlingarna)
STOCKHOLM



Bulletin N:o 17

Stockholm 1945

they settle at the side of the hill; how dare we fear marching? But we fear that we shall not be able to arrive (at the goal); you should give (etc., as in st. 1).

(a) When tired, they can take their rest. (b) Ch'i 色, ordinarily the pronoun of the 3rd person: 'him, them', occasionally serves for the 1st person ('me, us') or the 2nd person ('you'), see gl. 228 and ode 207, note.

Ode CCXXXI: Hu ye.

1. Waving about are the gourd leaves, we gather them and boil them; the lord has wine, he fills the cup and tastes it. — 2. There is that hare, we bake it, we roast it; the lord has wine, he fills the cup and presents it. — 3. There is that hare, we roast it, we broil it; the lord has wine, we fill the cup and present it in return. — 4. There is that hare, we roast it, we bake it; the lord has wine, he fills the cup and pledges us a thanksgiving-cup.

Ode CCXXXII: Ch'an ch'an chi shi.

1. The craggy rocks, oh, how high; the mountains and rivers are distant and far away, oh, how toilsome; the warriors march to the east, they have no leisure to take a (free) morning. — 2. The craggy rocks, oh, how high-pointed; the mountains and rivers are distant and far away, oh, how exhausting; the warriors march to the east, they have no leisure to (get out:) leave off. — 3. There are swine with white legs, in great numbers they wade through the waves; the moon (is attached to =) dwells in (the constellation) Pi (a), it causes a great flow (of rain); the warriors march to the east, they have no leisure to do anything else.

(a) 'The Heavenly Fork', see gl. 634.

Ode CCXXXIII: T'iao chi hua.

1. Oh, the flowers of the Bignonia, ample are the yellow ones; the grief of the heart, how painful it is. — 2. Oh, the flowers of the Bignonia, their leaves are luxuriant; If I had known that I should be like this, it would have been better not to be born. — 3. The ewes have big (horned) heads (a); the Three Stars are (seen) in the central roof-hole (b); even if people can get something to eat, there are few who can be satiated.

(a) Our leaders are weak creatures, though apparently strong. (b) Our leaders are seen in their splendour, far above the suffering people, doing nothing.

Ode CCXXXIV: Ho ts'ao pu huang.

1. What plant is not yellow; what day do we not march; what man is not going (to help in) regulating and disposing the (regions of) the four quarters? — 2. What plant is not dark; what man is not pitiable; alas for us men on war service, we alone must be as if we were not men. — 3. We are not rhinoceroses, we are not tigers, but we go along those wilds; alas for us men on war service, morning and evening we have no leisure. — 4. There is a thick-furred fox, he goes along that dark grass; there are the lath-box carriages, they march on that road of Chou.

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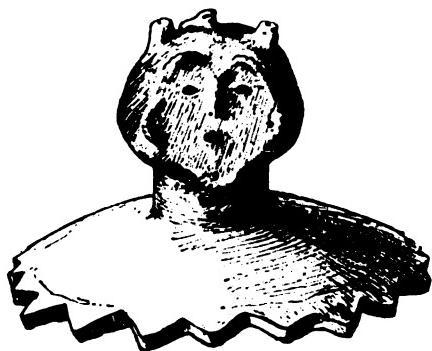
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BULLETIN OF THE MUSEUM OF FAR EASTERN ANTIQUITIES

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THE SITE OF CHU CHIA CHAI

HSI NING HSIEN, KANSU

BY

J. G. ANDERSSON

On the 21st July 1923 we started from Hsi Ning on our way to Kokonor. When travelling westwards on the north side of the Hsi Ning Ho I noticed 23 li (13 km) from Hsi Ning, at a place marked in my diary as Ma Pao Cha, in a low loess-cliff close to an irrigation canal, »pockets» of ashy earth. In these pockets I collected some fragments of pottery which appeared to be of a prehistoric type. As we shall see, this observation subsequently gave rise to a very important discovery.

On the 15th September 1923 we were back in Hsining from Kokonor and the Kueite canyon region. I now had to stay for some time in the city in order to write my reports and pack my collections. During this time I sent some of my men to reconnoitre on the northern side of the Hsi Ning Ho in the area mentioned above as Ma Pao Cha, where I had seen some potsherds when starting for Kokonor in July. At the place just mentioned my collectors found nothing of real importance, but, upon extending their search further west, they located at Chu Chia Chai a site of Yang Shao type, which looked very promising. Here we spent most of October and located not only a rich dwelling-site but also the corresponding burial ground.

The Chu Chia Chai site is located 17 km above Hsi Ning, on the N side of the Hsi Ning Ho (Fig. 1).

The river plain of the Hsi Ning Ho is here very broad, as is seen from Pl. 28 A. The village of Chu Chia Chai is situated on the northern side of the river at the base of a small hill rising more than 210 m. above zero of our survey, which runs through the burial place in the southern half of the village. A small tributary to the Hsi Ning Ho runs in a southerly direction, with a winding course, half a kilometer E of the village. (Fig. 2).

In the northern and larger part of the village, culture soil was noticed in many places, in road ravines and especially beneath the houses. In fact, the best places were just inside the village under some houses. In this deposit my men had already before my arrival made extensive collections of pottery and other artifacts of a type indicating late Yang Shao age.

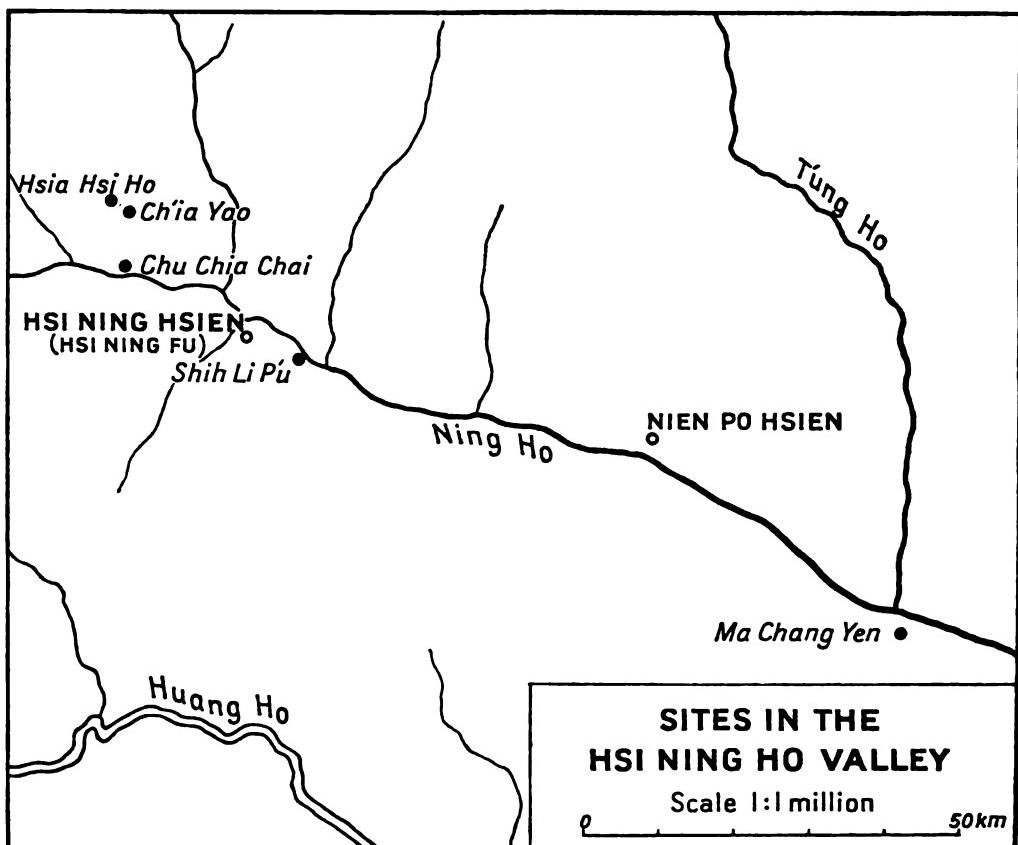


Fig. 1.

Very soon after my arrival I discovered the rich and interesting cemetery in the southernmost part of the site, and this subsequently absorbed all our attention. For this reason I must here limit my note on the dwelling-site to a statement of its extent in a triangular figure with a length in N—S direction of 850 m. and a maximum width of 470 m., giving an area of about 200,000 square meters. The rich dwelling-site deposit is confined to the northern section of the area within the large northern part of the village Chu Chia Chai. The southern part of the site close to the north of the smaller rectangular southern part of the village is entirely dominated by the cemetery (fig. 2).

Topographically, this site, as well as other sites studied by me in the Hsi Ning Ho basin, are characterized by the fact that they are not located on the escarpments of Malan terraces, as is the case with dwelling-sites of the T'ao Ho and the Kueite valleys. Here the sites lie on the gently sloping river plains of the recent streams.

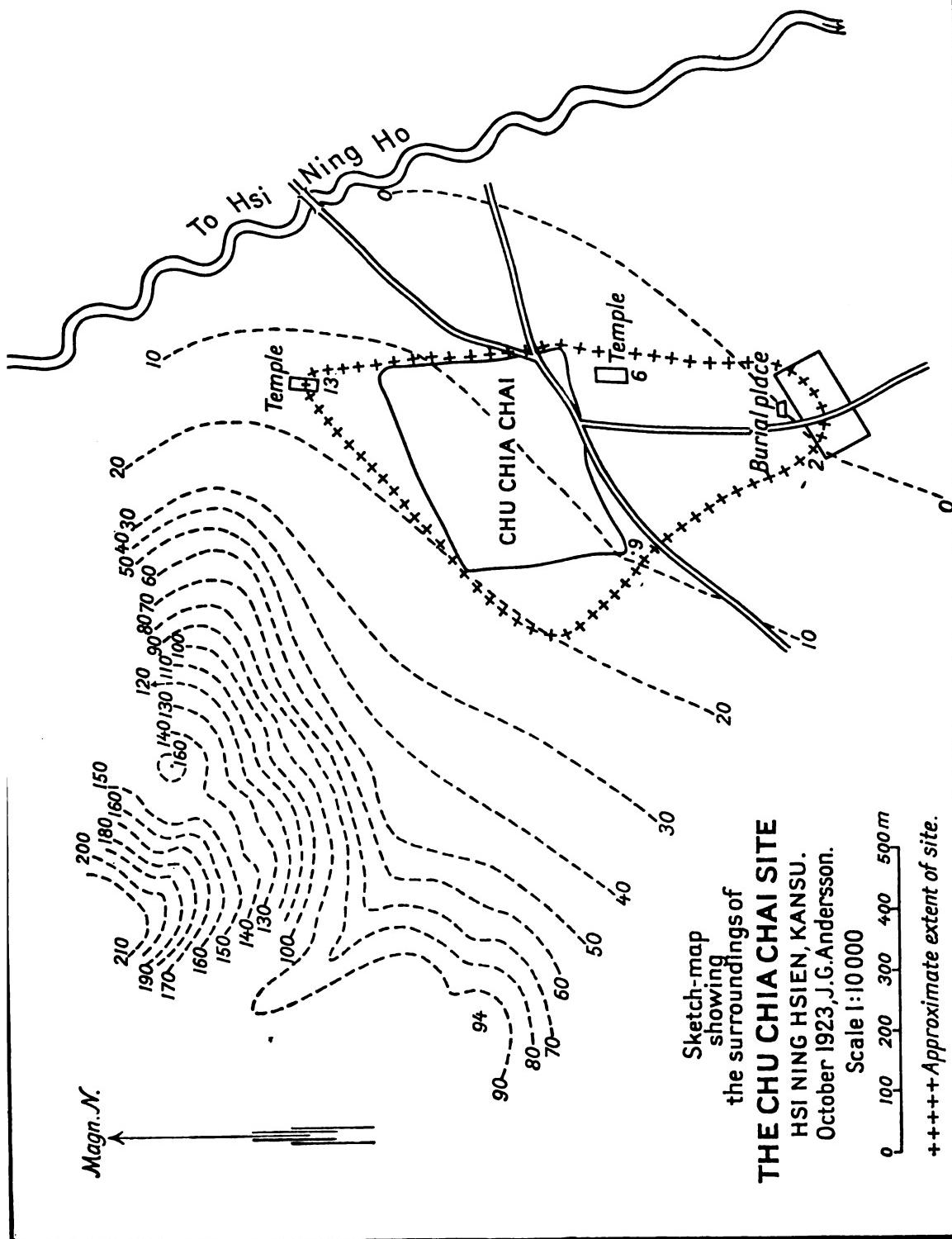


Fig. 2.

THE BURIAL SITE OF CHU CHIA CHAI.

METHOD OF SURVEY.

During our excavations of the Chu Chia Chai dwelling-site some complete pots were dug out by my men in that southern part of the village which is indicated on text-figure 2 by a rectangle extending NE—SW. The exact place of these first finds was near the road at the letters »ial» of »Burial site» on the map. From my experience of the excavation at Yang Shao Tsun in Honan, where a large burial place was found in the southern part of the site, I surmised the possibility of finding a similar burial place at the mentioned spot within the Chu Chia Chai site.

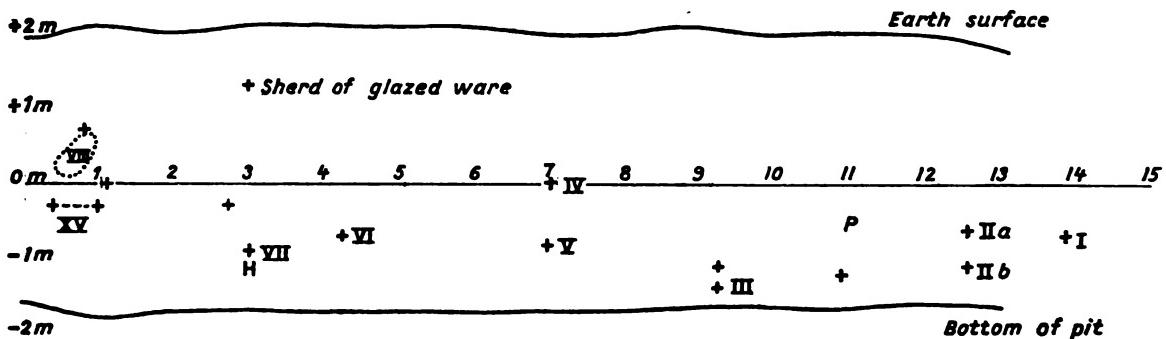


Fig. 3.

Close to the north of the rectangular settlement marked on the map, there was a pit from which the farmers dug *huang t'u* for mixing with the manure. Upon examining the wall of this pit I soon discovered traces of human bones, and even a number of beads became visible on this first reconnaissance. Before beginning excavations on a large scale I surveyed this wall, which is shown in text-figure 3. The Roman figures refer to the numbered graves as described below.

As the indications of burials were all in the northern wall of the pit it was evident that further graves were to be expected to the north of the pit. Here was a wheat-field, but an arrangement having been come to for the indemnification of the owner, excavations were started. Fig. 4 shows the dimensions of the small spot excavated by us. First we dug out the SW section marked by figure 1, later we extended our operations to section 2 and finally to 3, excavating in all 74 square meters. Further graves may be expected to the north of the area explored by us, but as other sites were calling for my inspection I had to discontinue the work at Chu Chia Chai before all the graves could be excavated.

As will be seen from the section shown in fig. 3, no graves were encountered in the first metre from the present earth-surface, but here, at a depth of 0.7 m., a piece of modern porcelain was found, indicating the removal of soil by the farmers, a frequent experience in our archaeological excavations.

In the second metre from the surface only the burial VIII was met with at a depth of 1.3 m. The majority of the burials shown in the section were found in the third metre, but one burial (III) was found as far down as 3.4 m. below the surface.

The plan of the entire excavation (fig. 5) shows the vertical position of the individual burials referred to a local datum level, zero, which is two metres below the surface of the earth as shown in section fig. 3.

When starting on the excavation of the Chu Chia Chai burial site I had made up my mind to proceed with the plotting of the different burials by the same method of survey as that later employed with such complete success in the Chia Yao grave

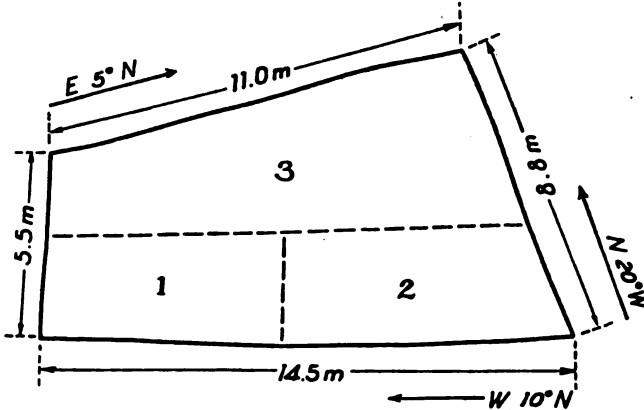


Fig. 4.

field and the Sha Ching S. grave field. In both these cases all the burials were exactly recorded by means of bearings from one single central point and the tape measurement of the distances in cm.

The Chu Chia Chai survey was started in exactly the same manner, with P as centre of the polar coordinates (textfig. 5). In order to establish a datum point that could be identified if this partial excavation should be continued by another scientist, I took first of all from point P a bearing to a tree at a distance of 8.40 meters from point P. In the bark of this tree, exactly at zero level, I cut a cross which may serve for future reference to my survey.

I then measured from point P the position in the plan of all the zero-level pegs, 1—14 shown in the section fig. 3. From point P I also measured some distant finds in a westerly direction (Police, Skel. X and Chang pot) as well as the position of Skel. XII.

But already at this very early stage of the excavation such masses of earth were accumulating between P and the burials that some new means of surveying had to be resorted to. In the nick of time I measured from P two auxiliary stations, a and b, in the western half of the excavation. At a later stage two further auxiliary stations, c and d, were measured from a and b, and from these four auxiliary points the majority of the measurements were taken (fig. 5).

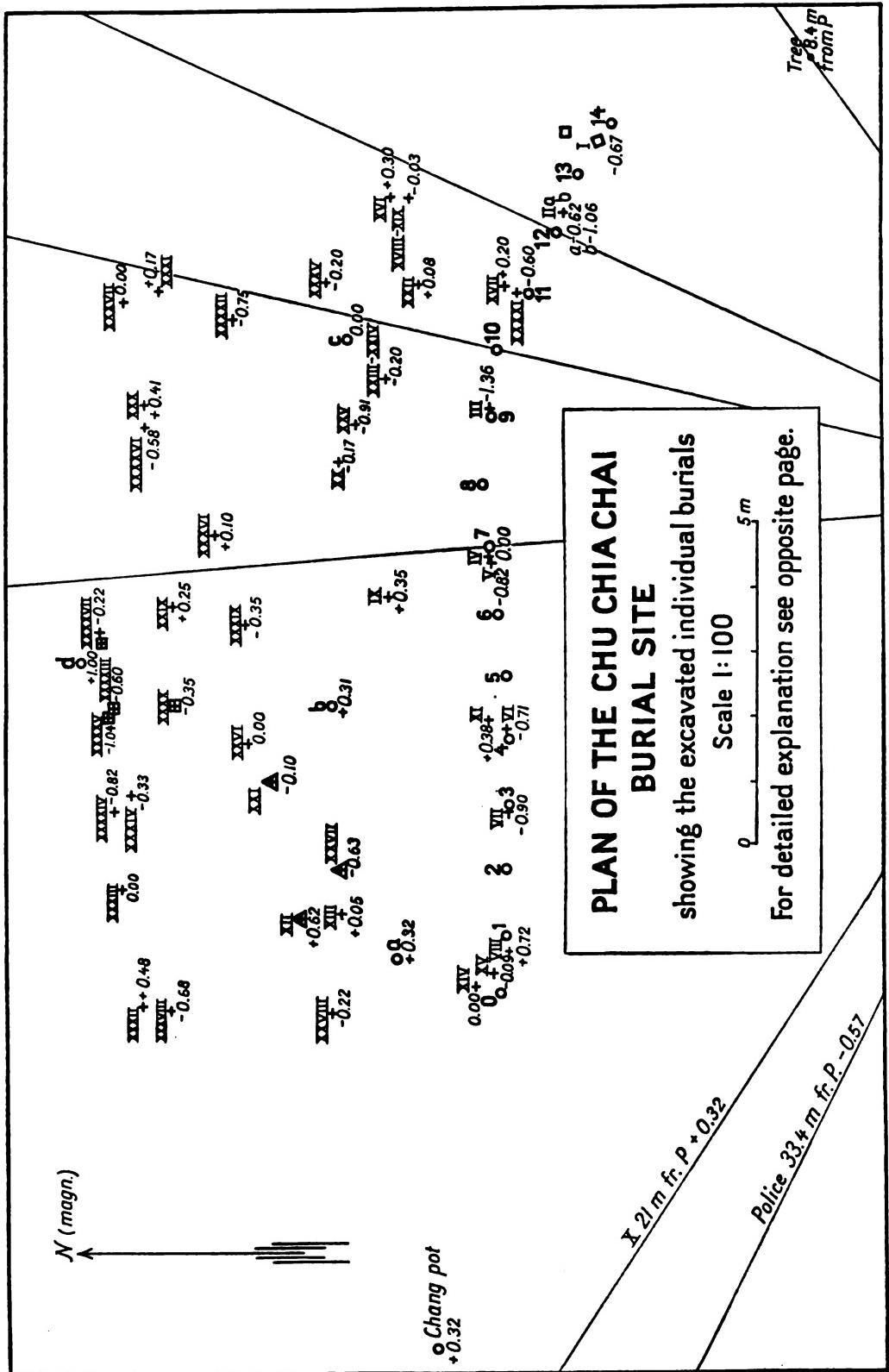


Fig. 5.

EXPLANATION TO FIGURE 5.

For considerations of space we are unable to present here the whole area of the Chu Chia Chai survey.

The position of P, the point from which all the initial measurements were taken, is easily reconstructed by confluence of the lines X, 7, 10 and 12. On the spot its position can be indentified by a crossmark \blacktriangleleft on the W side of the tree (this mark is in "zero level")

The figures 0—14 mark the pegs in the preexisting loess wall. a, b, c and d are secondary surveying stations substituting P which soon became obsolete as excavated soil was piled high in front of it. The distance between the two walls is 8.40 m from one corner Δ on one W side or the vice (thus mark is in zero level).

X and Police are two finds outside the area of the map. X is 21 m from P and 0.32 m above zero. Police is 33.4 m from P and 0.57 below zero.

- marks the positions of fragments of urn Pl. 1,4.

DESCRIPTIONS OF INDIVIDUAL BURIALS.

Skeleton I. Fig. 6. Head missing owing to previous excavation by the farmers. The pelvis was lying deepest down. The leg bones were, on an estimate made from memory, 20 cm. higher. The left femur went obliquely down to its natural attachment to the pelvis. The right femur was found to have been removed 0.8 m. to the west.

The broken pot (K. 5911) was squeezed in beneath the tibia-fibula of the left (?) leg and these bones had to be removed before the pot could be dug out.

Beneath the slightly dark-coloured layer where most of the burials were concentrated

we found everywhere in this burial site fine pure yellow sand, which seems to have formed the local surface sediment at the time when the burials were effected. On the eastern and northern sides of this skeleton it could clearly be seen that the dark soil whereon the bones lay formed a shallow pit in the pure yellow sand. Apparently a pit had been dug into which the corpse was squeezed down with the legs lying slightly higher than the rest of the body.

The soil above the heap of bones contained small pieces of charcoal, though more sparsely than in the case of the soil above II a.

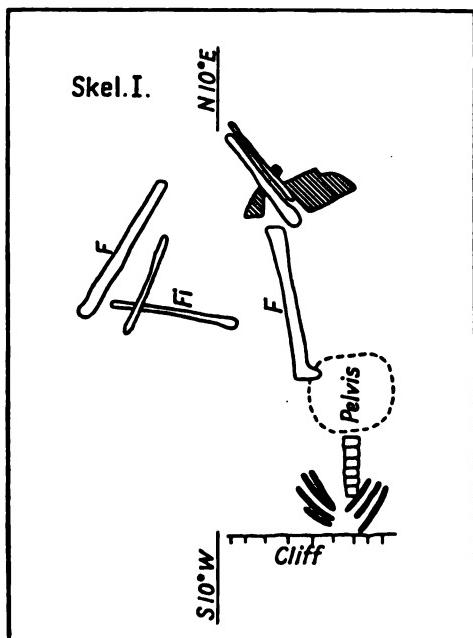


Fig. 6.

colour of the soil (from burning?) continued downwards for 50 cm. to the surface of the bone-heap.

Three beads, one close to the outside of the pot, one 15 cm. deeper, one 50 cm. below zero-level, lay on the surface of the bone-heap (K. 12.111: 2—9); here also was a needle, the point of which was broken during the digging and could not be recovered.

The bone heap, the surface of which is 50 cm. below zero, consisted of a densely packed mass of bones of the upper half of the body: mandible, costae, vertebrae, scapulae etc. The bones lay in a confused heap: the mandible was lying upside down with two vertebrae inside it and costae packed round it.

In the upper part of the bone-heap, close by the scapulae, was found a green stone pendant (K. 12.111: 1). Four further beads were found inside the bone-heap. Part of the skull with the complete set of teeth was also found in the bone-heap. Close by the palate a detached vertebra.

Skeleton II b. [Andersson¹⁾]

0.5 m. below II a Chin found part of a mandible; this find induced me to undertake an excavation, which uncovered a second heap of human bones, and among them 6 beads (K. 2143). In an easterly direction from this bone heap were found the following pots, which may belong to this skeleton:

1. Pot with two lugs and painted design in the shape of rings, 1.14 m. from peg 12 in E direction, 1.05 m. below zero.
2. Bottom of a large painted vessel: 1.57 m. from peg 12 in the direction E 6° S., 0.72 m. beneath the peg.

Skeleton III. [Chin]

Uppermost a big high pot (K. 5915) lying with the mouth turned to the W.

About 30 cm. deeper, as shown in section fig. 3, a bone-heap which was very incomplete, a large part of it having been dug away before our arrival. Together with the bones the bottom of a large vessel (K. 6298), some smaller sherds, a number of small bone-plates, a long bead and a bone instrument (K. 2138).

Skeleton IV. [Chin] Fig. 7.

The position of the skeleton was remarkable insofar as it was resting on the ventral side with the back turned upward. The pelvic region had moved slightly westwards. The right scapula close to the head. The head bent to the left and forced back so that the face was nearly vertical.

Skeleton V. [Chin]. Fig. 8.

The skull was broken, with one humerus and some rib bones squeezed into it.

Close to the head were found 3 potsherds and a large number of beads (K. 2150: 2—46).

The cross on the plan Fig. 8 where the cliff cuts off the femur is the same as the cross in the section Fig. 3.

The cross west of the skull indicates a stone chisel (K. 2150: 1), which was found 32 cm. beneath the adjacent bones.

Skeleton VI.

A standing pot (K. 5913) with painted design, 2.3 m. from peg b in the direction S 15° W. The mouth of the pot 1.03 m. beneath peg b.

Round the mouth of the pot and above it to a height of 0.35 m. a heap of bones with the sacrum above the pot's mouth. The bones form an irregular square, the long bones lying N 20° W—S 20° E. Two layers of long bones, one femur in the lower one.

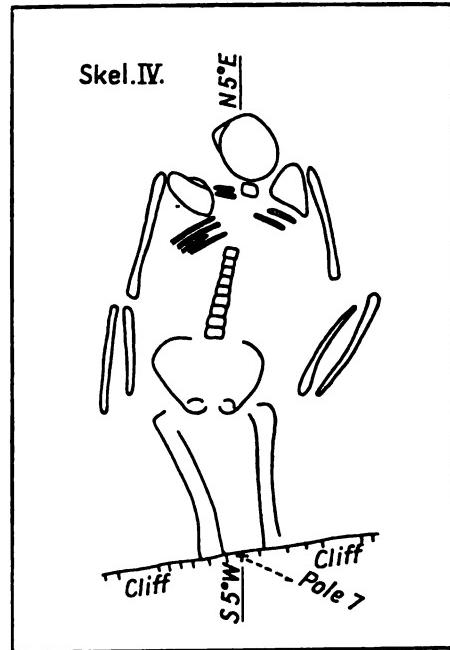


Fig. 7.

¹⁾ The name within brackets indicates the man who excavated the burial. Soon I found all my time occupied with surveying, as well as labelling and bandaging the specimens, leaving the excavation work to my men, except in critical cases, when I personally carried out the excavation.

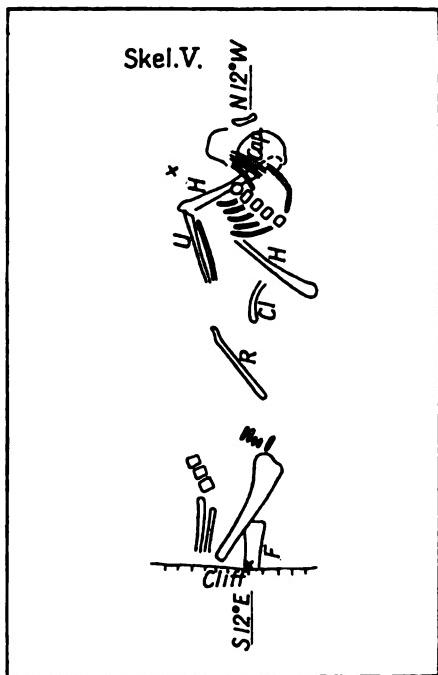


Fig. 8.

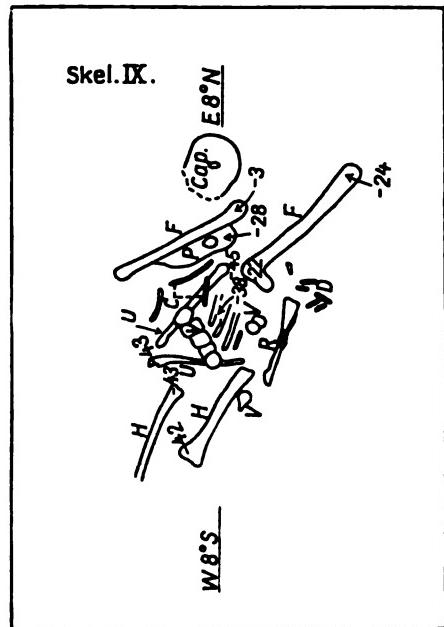


Fig. 9.

Close to the north side of the big pot a smaller one (K. 6143), also standing. In the earth round the pots 2 small green stones, stone beads and small minute rectangular bone-plates (K. 2133: 1—184). Inside the big pot a bone-plate and some bones (K. 2135).

Skeleton VII. [Chin]

On the spot marked H in the section Chin excavated a large number of small beads. About 20 cm. above this spot a few bones were visible in the cliff. During the excavation they proved so insignificant that they were thrown away.

Skeleton VIII. [Chen]

A bone-heap without skull extending obliquely downwards, as shown in the section Fig. 3.

A fragment of a painted vessel (K. 12.116) 2.15 m. NW from peg 3, 0.2 m. above the peg zero possibly belongs to VIII or to XII.

Skeleton IX. [Chin]. Fig. 9.

From peg 6 1.75 m. in the direction N 10° E to the top-point of the skull, 35 cm. above datum level. This top-point of the skull, marked 0 on the plan of this skeleton, is the local zero of this skeleton plan.

Among the bones a turquoise pendant, 6 bone splinters and 14 small beads. Among the small bones (fingers and toes) two bone needles and another bone object (K. 2143).

Skeleton X. [Chin]

A skeleton lying W 20° N head — E 20° S. The bone-heap 1.8 m. in length. The easternmost bones slightly higher than the head.

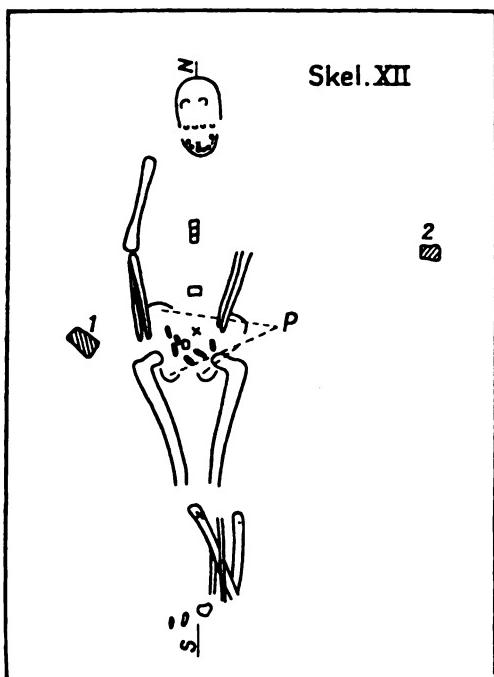


Fig. 10.

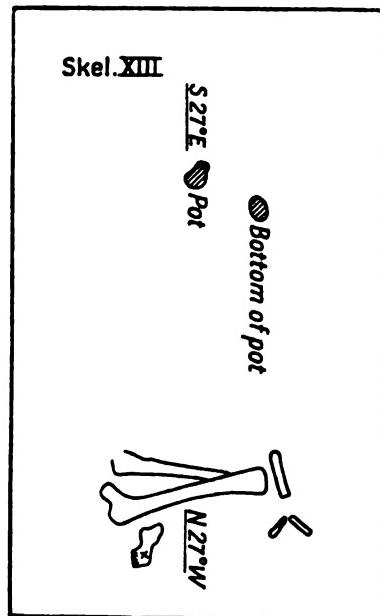


Fig. 11.

Skeleton XI. [Chen]

A skull only, turned upside down. Also the mandible turned upside down in front of the forehead with left outside touching left orbit.

Left half of occipital base blackened, apparently from burning.

Middle of the base of the skull, forming the skull's highest part, 0.38 m. above datum level. From peg 4 0.44 m. in the direction NE.

Skeleton XII. [Chen]. Fig. 10.

Lying naturally on its back. Head with the lower jaw wide open. Left humerus not visible, missing or dislocated downwards.

The orbits 0.62 m. above zero. The toes 0.20 m. lower than the orbits. Figure 1 to the west of the skeleton marks the position of a painted pot 20 cm. below the upper part of the pelvis. Figure 2, far to the east of the skeleton, marks one big and three small sherds of painted pottery, 15 cm. above the left underarm. 20 cm. below the toes a tubular black bone. Below the body some sherds of painted pottery.

Skeleton XIII and two pots probably not belonging to this skeleton. Fig. 11.

The cross on the fragment of the skull is 1.07 m. from peg a in the direction N 42° E., 27 cm. beneath peg a. The fragment of the skull was lying together with the limb-bones, as shown in the plan Fig. 11, quite isolated, and it seems hardly probable that the distant pots (K. 2097, K. 12.117) shown on the same plan belong to this burial, but rather to skeleton XII.

Skeleton XIV.

From peg o at a distance of 0.40 m. in the direction N 15° E a single skull.

Between the peg and the skull, a painted pot (K. 6147): 0.25 m. from peg o in the direction N 30° E.

Both the pot and the bottom of the skull on a level with the peg.

Skeleton XV. [Chen] See section fig. 3.

A bone heap in the direction W—E, length 1.30 m., width 30 cm.

Head at the western end raised in a nearly vertical position, facing east. Counting from the back of the skull 0.78 m. in E direction the mandible amongst leg-bones and ribs. A tooth 1.15 m. from the back of the skull near the «foot-end» of the bone heap. Ribs strewn all over the bone group from the shoulder eastwards to 1.05 m. from the back of the skull.

The parietal top of the skull 1.50 m. from peg a in the direction S 10° W and 41 cm. below the peg. The whole heap of bones nearly horizontal.

Skeleton XVI. [Chen]

A horizontal skeleton in a strictly N—S direction, head to the north. The head lying on its left side, twisted so that its occipital base is turned NW.

At the foot-end a piece of thin-walled pottery. 5 cm. north from the head a pot (K. 2153) obliquely turned towards WNW.

The base of the head 2.6 m. from peg 12 in the direction N 13° E. The right upper side of the skull 30 cm. above peg 12.

Skeleton XVII. [Chin]

Only the upper half of the skeleton remaining, the lower half cut away by a previous excavation by the farmers.

The skull 1.10 m. from peg 12 in direction NW. The parietal region 20 cm. above zero.

Direction of the skeleton N 15° E (head) — S 15° W. Nearly horizontal, the head however slightly lower than the rest.

Head with the parietal region turned upwards, face towards the north, which may indicate that the body was laid on its ventral side. Compare Skel. IV.

Skeleton found by policeman.

Skeleton lying horizontally on its back. Lower half of legs cut away by a previous excavation. No trace of head. Costae, pelvis, arms and upper part of legs preserved.

Direction W 30° N (head) — E 30° S.

Skeleton XVIII and XIX. [Chen] Fig. 12.

Two skulls close together with various bones on either side.

The left eye of the northern skeleton is 2.38 m. from peg c in the direction E 23° S. Highest part of the skull 3 cm. below zero.

The bones approximately all on the same level, 10—12 cm. beneath the highest part of skull N.

Skeleton XX. [Chang] Fig. 13.

A nearly horizontal skeleton.

The skull 1.85 m. from peg c in the direction W 5° N. The top of the skull 17 cm. below zero.

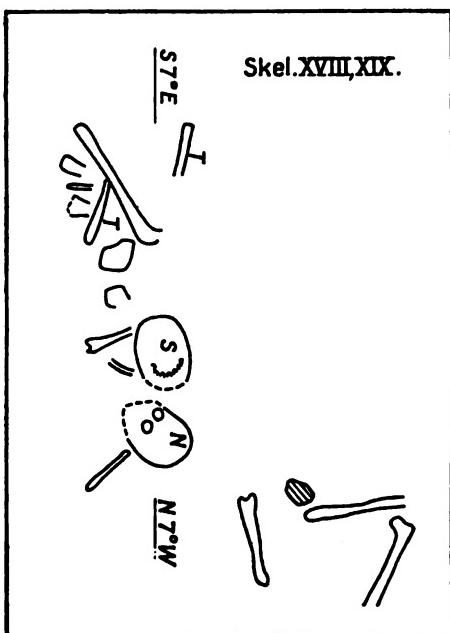


Fig. 12.

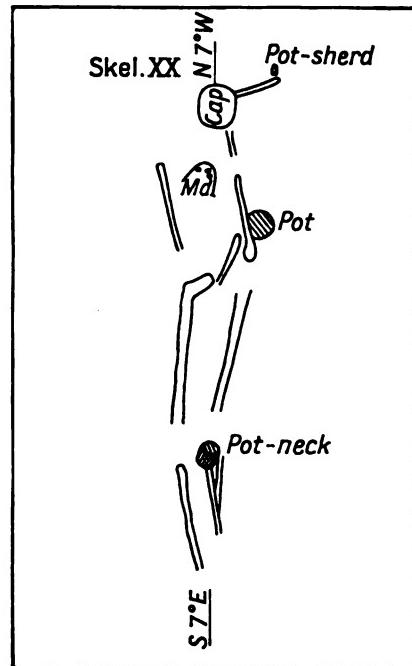


Fig. 13.

Under the eastern humerus a small pot (K. 2101) with wide mouth lying on its side. Uppermost part of this pot 30 cm. below zero.

Skeleton XXI. [Li]

A skeleton in a quite horizontal position. W 30° N (head) — E 30° S. The skull lying on its right side with the face turned towards W 30° N. The skull 6.95 m. from peg c in the direction W 10° N. The top of the skull 10 cm. below zero.

The bone-heap is very regular, 25—30 cm. broad. Visible length 1.54 m., the feet missing. Where the feet should be is a striped potsherd. Round the head were found 20 small beads (K. 2149 a).

Skeleton XXII. [Chen] Fig. 14.

The top of the skull from peg c 1.37 m. in the direction S 38° E. Top point of skull 8 cm. above zero, other bones and pottery 20—30 cm. lower down.

When digging underneath this skeleton and in a northerly direction Chen found stone-beads and a great many minute bone-plates (also in whole groups, as they lay in situ (K. 2136). Also some human bones. Position of all these objects: 1.10 m. from peg c in the direction E 15° S, 72 cm. below zero.

It is possible that these objects also belong to skeleton XXII.

Skeleton XXIII and XXIV. Fig. 15.

Two skulls and two mandibles with several other bones, one pot (K. 2156) and several small artifacts, the whole forming a rather puzzling aggregate.

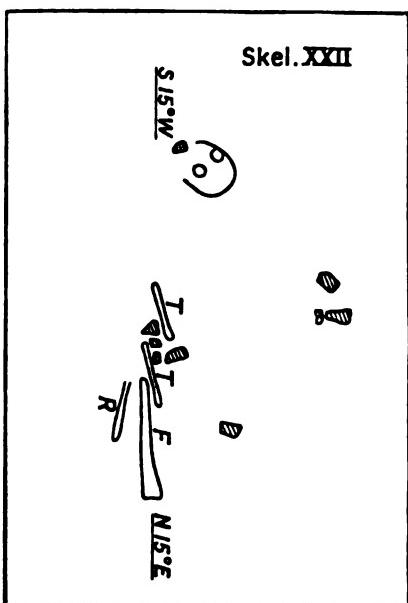


Fig. 14.

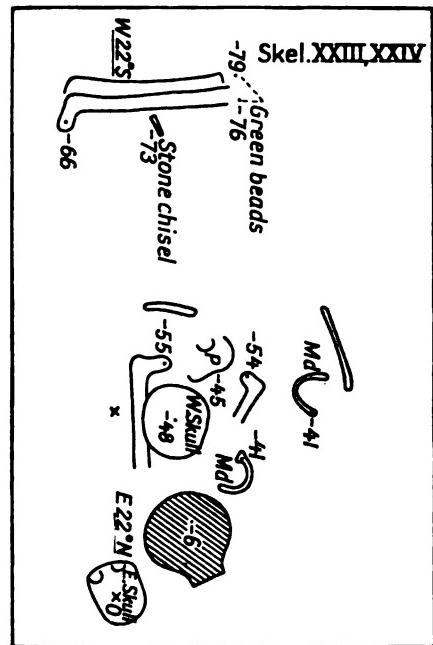


Fig. 15.

Eastern head nearly vertical, slightly turned towards the south, facing west. Western head resting on its right side, parietal region turned south. The mandibles standing in a nearly vertical position.

Mouth of the pot turned ENE and slightly downwards. The top of the eastern skull 0.82 m. from peg c in a SW direction and 20 cm. below zero.

W of this main group two femora and, with them, a stone chisel, 2 green beads and 11 marble beads (K. 2140).

Skeleton XXV. [Chin]

The lower part of a skeleton: pelvis and legs lying horizontally on the dorsal side, direction W 10° S (pelvis) — E 10° N (foot-end). From peg c 1.30 m. to pelvis in the direction W 5° S. Pelvis 91 cm. below zero.

This skeleton may possibly belong to the same burial as the flintbone knife and associated objects.

Below the pelvis were found 13 miniature imitations in bone of Cypraea moneta (K. 2129).

Additional notes.

In this part of the burial site a number of isolated finds were made which could not with certainty be referred to definite skeletons:

1. 1.90 m. from peg c in the direction W 10° N 90 cm. below zero the flintbone knife (K. 2139: 1), a turquoise pendant (K. 2139: 2) and 5 marble beads (K. 2139: 3—7).
2. Policeman's two pots (K. 2104): 4.95 m. from peg o in the direction E 40° N. Both pots standing upright. Their mouth 10 m. above zero.
3. »Police« potsherd: 1.50 m. from peg o in the direction N 10° E, 30 cm. above zero.

4. »Li-Mafupots» (K. 5914, K. 2100) 1.0 m. from peg c in the direction W 15° N. Both pots lying on their side. Uppermost parts of the pots 12 cm. below zero.
 5. Skull underneath »police» pots, 5.05 m. from peg o in direction NE. The uppermost part of skull at zero level. The pots immediately above skeleton XXVI.

Skeleton XXVI.

Uppermost part of skull at zero level 5.05
m. from peg o in a NE direction.

Additional notes. 14/10.

1. •Policeman's• pot (K. 2098) 1.38 m. from peg c in the direction N 37° W. Highest part of pot 49 cm. above zero.

2. Chang's pot-fragment 3.20 m. from peg d in the direction S 24° E, 97 cm. above zero.

3. Chen's large pot (K. 2151) 2.62 m. from peg d in the direction S 5° E, 67 cm. above zero. Standing upright.

4. Chang's pot (K. 6293) 3.65 m. from peg d in the direction S 42° E, 55 cm. above zero.

Skeleton XXVII. [Chin] Fig. 16.

Parts of a skeleton very confusedly mingled and associated with one black (K. 2153) and two (?) other pots (K. 6148, K. 6292).

Skull lying on left side with base to the east. Its upper side 63 cm. below zero. Mandible on a level with skull. Centre of skull 3.1 m. from peg o in the direction N 37° E.

Difference in level between highest and lowest part in group 40 cm. E red pot rests upon the upper part of skull. Base of W red pot (standing) on a level with uppermost part of skull. Mouth of black pot (turned downwards) on a level with lower side of skull.

Skeleton XXVIII. [Li]

A long narrow skeleton in the direction N 12° W (head) — S 12° E.

Uppermost part of skull 2.64 m. from peg o in the direction N 7° W. 22 cm. below zero.

Only the skull preserved.

Additional notes. 15/10.

1. Policeman's pot in two pieces (K. 6202): 2.30 m. from peg c in the direction N 30° E. Bottom of pot 14 cm. above zero.
 2. Policemen's pot-base (K. 6297): 2.37 m. from peg o in the direction N 28° W, 15 cm. above zero.
 3. Policeman's black potsherd (K. 2082): 2.15 m. from peg c in the direction E 35° N, 35 cm. above zero.

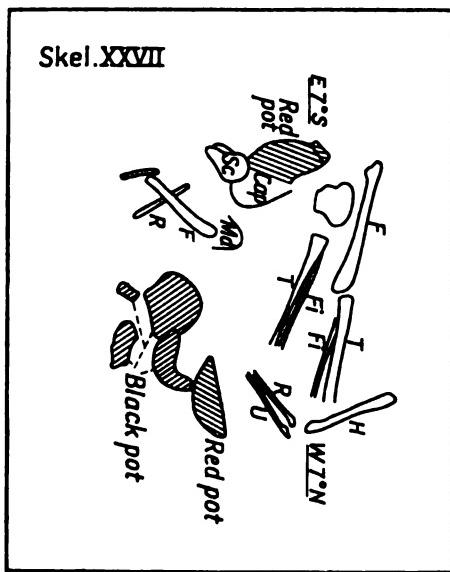


Fig. 16.

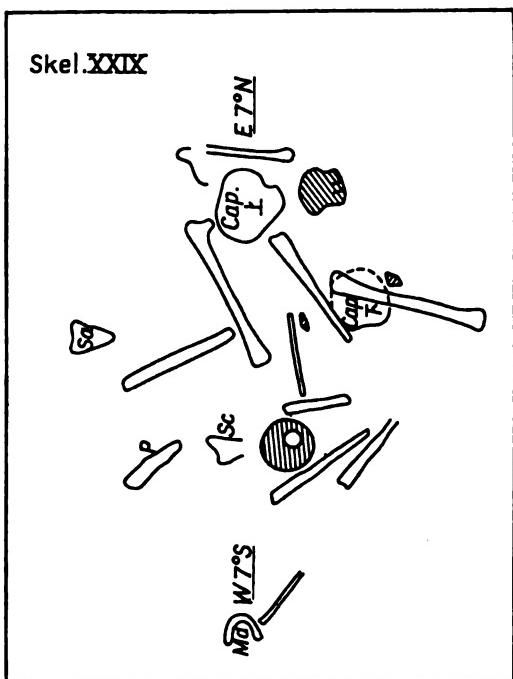


Fig. 17.

4. Li's potsherd 1 (K. 12.121): 1.60 m. from peg d in the direction S 43° W, 31 cm. below zero.
5. Li's potsherd 2 (K. 12.127): 1.30 m. from peg d in the direction W 35° S 7 cm. below zero.
6. Policeman's afternoon pot 1 (K. 5916): 0.95 m. from peg c in the direction E 33° N. Uppermost part 6 cm. below zero. Standing upright, turned 30° SW.
7. Policeman's afternoon pot 2 (K. 2102): 3.20 m. from peg c in the direction N 15° E, 40 cm. above zero.
8. Li's afternoon pot (K. 2095): 2.30 m. from peg d in the direction W 30° S, 16 cm. below zero.

Skeleton XXIX. [Chen] Fig. 17.

Two skulls, one upper and one lower, with one mandible and several other bones. Also one pot (K. 6144), one pot-neck (K. 12.123) and two small sherds.

Centre of skull 1.65 m. from peg d, direction S 32° E. Upper, left side of skull 25 cm. above zero. Neck of pot near this

skull slightly higher. From this piece the whole group slopes down to the mandible, the upper part of which is 28 cm. below upper part of skull. 0.6 m. S from the main group a small accumulation of human teeth and other small bones.

Skeleton XXX. [Police]

Single skull: 3.30 m. from peg c in the direction N 18° W. Uppermost part 41 cm. above zero.

Skeleton XXXI. [Police]

A skeleton in regular horizontal position N 4° W (head) — S 4° E.

A detached piece of the skull inside the mandible.

The mandible 3.03 m. from peg c in the direction N 14° E. Uppermost part of mandible 17 cm. above zero.

Only the skull preserved.

Skeleton XXXII. [Chin]

Skeleton in regular horizontal position lying on its back: N 8° W (head) — S 8° E.

Head 5.35 m. from peg d in the direction W 10° S. The frontal region 48 cm. above zero. Mouth open.

Skeleton XXXIII. [Chen] Fig. 18.

Skull lying on right side, facing W. Its centre 3.55 m. from peg d in the direction W 10° S. Upper, left side of skull at zero level.

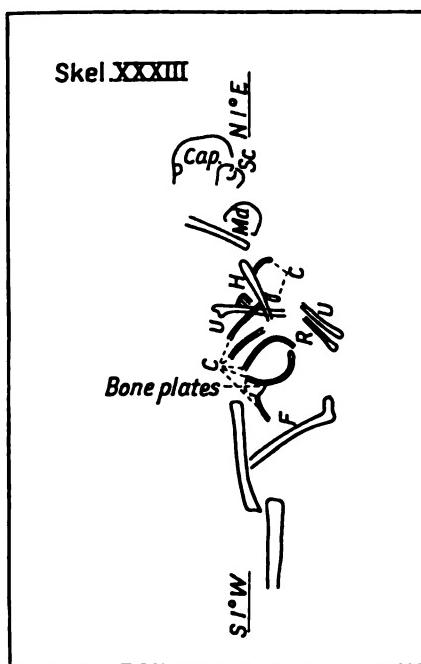


Fig. 18.

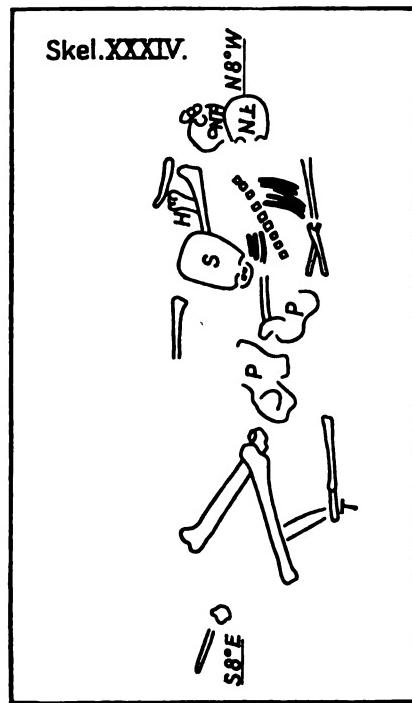


Fig. 19.

The skeleton, which is considerably dislocated, seems to be lying on its right side. Some bones 25 cm. above the upper side of skull, some others and the potsherd 6 cm. below the lower side of skull.

Beneath the ribs were found beads and minute bone-plates (K. 2137) on a level with the potsherd. Some other bone-plates were found at the head, and careful excavation proved beyond doubt that they were not lying together but in small groups or isolated.

Skeleton XXXIV. [Li] Fig. 19.

Three skulls (N upper, N lower and S) and various other bones.

Parietal part of skull S 2.20 m. from peg d in the direction W 20° S. Parietal region of this skull 33 cm. below zero. Parietal point of skull N upper 37 cm. below zero. Skull N lower 53 cm. below zero.

13 marble beads, 7 bone-plates (K. 2130).

Skeleton XXXV. [Police]

Skull 0.95 m. from peg c in the direction E 20° N. Uppermost part 20 cm. below zero.

Skeleton XXXVI. [Chang]

Horizontal skeleton in the direction N 16° W (head) — S 16° E. Back of head 3.65 m. from peg c in the direction W 35° N. Uppermost part of skull 10 cm. above zero. Skull lying obliquely on left side with eyes turned downwards in an easterly direction.

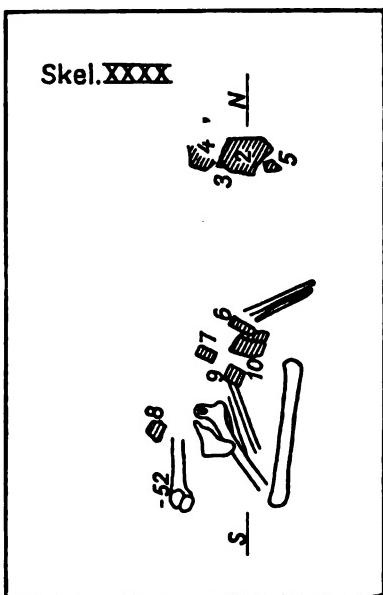


Fig. 20.

Skeleton slightly dislocated. One femur moved 12 cm. southwards from pelvis. Lower half of both legs moved 15 cm. NE.

Immediately below this skeleton Chang excavated a steatite bead, an amazonite pendant and 42 marble beads (K. 2145).

Skeleton XXXVII. [Chuang]

Skeleton nearly horizontal, head slightly higher, lying on its ventral side in the direction N 6° W (head) — S 6° E.

Neck of skull 3.50 m. from peg c in the direction N 10° E. Neck at zero-level, lower part of legs 20 cm. lower.

Considering the fact that often in the case of previous skeletons no toes had been observed, I carefully excavated the left leg of this skeleton and ascertained that there were no foot-bones, the tubular parts of the tibia and fibula ending blindly in the soil without joints.

Only the skull preserved.

Skeleton XXXVIII. [Chin]

Group of bones in great disorder. Mandible between the sacrum and one half of the pelvis. Other half of pelvis 40 cm. to S. One femur 40 cm. E from pelvis.

The bones form a one metre square. In the NW corner of this quadrilateral is the mandible, which is 5.55 m. from peg d in the direction W 14° S.

Uppermost part of mandible 68 cm below zero.

Skeleton XXXIX. [Chen]

An irregular group of bones. Furthest NW and highest an overturned mandible. 30—80 cm. to the SE and 20—60 cm. lower down a group of long bones, and together with them the lancet-shaped bone-plates and beads (K. 2142).

The mandible 2.55 m. from peg d in direction S 14° E. Uppermost part of mandible 0.35 m. below zero.

Skeleton XXX. [Li] Fig. 20.

A very irregular group of bones and pottery.

Caput femoris highest: 1.55 m. from peg d in the direction S 24° W, 48 cm. below zero. Bones and pottery 35 cm. below this level. A large bone deeper down, 62 cm. below the same level.

The potsherd marked No. 1 is not shown in the figure. It was found 40 cm. N from the big sherd No. 2 and 43 cm. above cap. femoris.

Skeleton XXXI.

A skull 2.70 m. from peg c in the direction S 15° E. Upper side of skull 60 cm. below zero. Skull lying on left side facing south.

Close to the NE side of skull a small pot (K. 2103) with interesting painted meander decor. Mouth turned obliquely upwards and to the S.

Only the skull preserved.

- K. 2131: 1. Very small reddish-white marble bead.
- : 2. Elongated, very irregular bead of green turquoise. Length 9.5 mm.
- : 3. Turquoise pendant. A thin sheet of turquoise supported by a thicker body of blackish matrix. Two perforations. Length 20 mm.
- : 4. Beautiful turquoise pendant found by Dr. Davidson Black when cleaning the skeleton. Described in »Prehistory« p. 129, Frontispiece plate 2,16.

Additional notes. 17/10.

1. Chen's black potsherds. 2.90 m. from peg c in the direction W 20° N. Uppermost sherd 65 cm. below zero.
2. Chen's black upper pot (K. 2154). 3.60 m. from peg c in the direction W 20° N. The pot standing, mouth 1.10 m. below zero. Some bones 20 cm. above this pot.
3. Li's evening pot. Lying with mouth to the north.
4. Chin's pot-base (K. 6301): 4.68 m. from peg d in direction W 10° S, 28 cm. below zero.

Skeleton XXXXII. [Police]

A quite regular skeleton lying horizontally on its dorsal side. Direction W 27° N (head) — E 27° S.

Head raised approx. 45°, with orbits turned obliquely upwards and to the east. The frontal part of head 1.80 m. from peg c in the direction N 10° E. Frontal part 75 cm. below zero.

Four sherds of small painted pot close behind head (K. 2090: 1—4). Some stone beads (K. 2126) close to and above shoulder. 3 small bones, 2 bone cowries, 47 marble beads (K. 2148).

Only the skull preserved.

Skeleton XXXXIII. Fig. 21.

A skull 0.85 m. from peg d in the direction W 30° S. Uppermost part of skull 60 cm. below zero. From the skull the group of bones slopes uniformly down to a large southern bone, the northern and lower end of which is 65 cm. below the top point of the skull. This bone is the same as the southern -62 bone of the plan of Skel. XXXX. Possibly XXXX and XXXXIII are parts of the same burial.

One bone cowrie and 20 marble beads (K. 2146).

Additional notes. 18/10.

1. Policeman's morning pot (K. 2093). 2.15 m. from front of Skel. XXXXII in the direction N 34° W. Pot lying with mouth 20° above horizon facing WNW. Uppermost part of pot 40 cm. below zero.

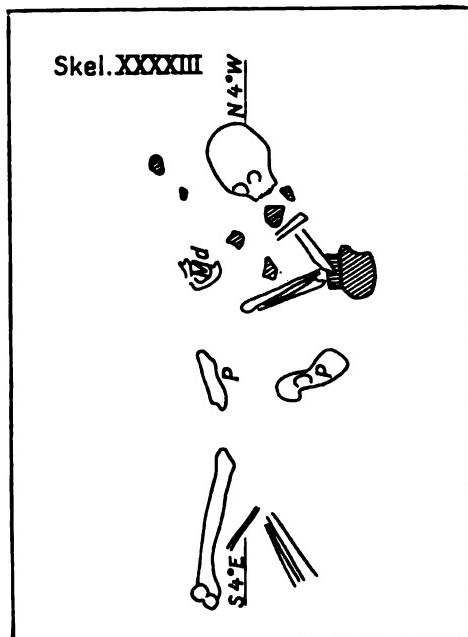


Fig. 21.

2. Chuang's pot (K. 2152). Turned upside down. Centre of bottom 2.55 m. from peg d in the direction E 5° S. Bottom 15 cm. above zero.
20 cm. E and 25 cm. below bottom of Chuang's pot a big painted potsherd. 60 cm. SE from Chuang's pot and 20 cm. below its bottom a group of sherds.

Skeleton XXXIV. [Li]

A painted pot (K. 5912). 2.32 m. from peg d in the direction W 12° S. Lowest part of pot 82 cm. below zero.

From this pot in the direction S 15° E an irregular heap of bones, nearest the pot a mandible, followed by pelvis, costae, vertebrae and, furthest south, some long bones.

Skeleton XXXV. [Li]

Skull lying on its left side facing ESE. Skull 0.90 m. from peg d in the direction W 25° S, and 1.04 m. below zero.

From this skull in the direction S 12° W a narrow heap of bones in disorder. Mandible 30 cm. from skull in southerly direction.

20 cm. N from head and 15 cm. higher two potsherds (K. 2088: 1—2), one certainly belonging to the big pot Skel. XXXIII.

Only the skull preserved.

One bone cowrie, one bone bead and 21 marble beads (K. 2128), 4 bone cowries and 6 beads (K. 2144).

Additional notes. 19/10.

1. In the NE corner of our excavation the policeman found some small bones and also some large fragments, possibly belonging to a skeleton not noted by us. He there found a beautiful small stone axe (K. 2106) and some potsherds (K. 6145): 5.0 m. from peg d in the direction E 15° N. Level 10 cm. above zero.
2. »Policeman's second pot (K. 6150): 5.60 m. from peg d in the direction E, 0.41 m. above zero.

Skeleton XXXVI. [Chin]

Skeleton lying horizontally on its dorsal side, in the direction W 10° N (neck) — E 10° S (feet). At the neck a mandible turned upside down, above the feet a skull with orbits turned obliquely upwards in a SE direction. The mandible 2.30 m., the skull 3.80 m. from peg d in the direction E 15° S. Mandible 0.88 m. and skull 0.58 m. below zero.

Underneath this skeleton 69 beads and two bone imitations (K. 2127) of Cypraea moneta.

Only the skull and mandible preserved.

Skeleton XXXVII. [Chuang]

Skull surrounded by some bones 0.50 m. from peg d in the direction E 30° S. Uppermost part of skull 22 cm. below zero. 0.26 m. from skull in the direction N 28° W pieces of beautifully painted pottery (K. 2105). Lowest part of this pottery on a level with uppermost part of skull.

Only the skull preserved.

41 marble beads (K. 2147).

Additional notes. 19/10.

3. Chin's pot. A large fragment of a small painted pot 2.40 m. from peg d in the direction E 5° S. Pot 23 cm. below zero. Underneath the pot in an E direction some large bones, probably a skeleton lying in a N—S direction.
4. «Policeman's» pot-base (K. 6300): 5.85 m. from peg d in the direction E 10° S. 90 cm. below zero.

DETAILED LIST OF SMALL FINDS.

Skeleton II a. K. 12.111: 1—9.

One bead close by the pot, another 15 cm. underneath it. One bead and the needle on top of the heap of bones. The green pendant lying among the bones. Four other beads among the bones.

- : 1. Turquoise pendant, three borings. Length 21 mm.
- : 2. Broken bone needle.
- : 3—9. Small marble beads.

Skeleton II b. K. 2149 b.

5 small and 1 broad marble bead.

Skeleton III. K. 2138. Mark :

- : 1. Long stone bead, turquoise? 16.5 mm. long.
- : 2. Bone instrument, unrecognizable owing to corrosion.
- : 3—17. 15 bone plates, all more or less fragmentary. With dents near the ends. Two have 4 dents, 2 near each end, one or more had dents at one end only.
- : 18—28. 2 complete plates without dents, 9 fragments, one with an incised diagonal cross.

Skeleton V. K. 2150: 1—46.

- : 1. Stone chisel.
- : 2—4. Potsherds.
- : 5. A group of stone beads in situ. The vast majority are white marble beads but inserted among them are three beads of some dark stone.
- : 6—46. Loose marble beads of same size as those of : 5, probably belonging to the same necklace.

Skeleton VI. K. 2135.

Inside is a big pot. Some bones and a bone-plate. Length 25 mm. Width 4.5 mm.

Near Skeleton VI. K. 12.110: 1—51.

Pale-rose-coloured marble beads varying in size: Diam. 3.5—5 mm. Thickness 1.5—4 mm.

Skeleton VI. K. 2133: 1—184. Mark :

- : 1. Small fragment of greenish-grey jade-like rock.
- : 2. Small pendant with central hole. Turquoise.
- : 3—82. Marble beads, white, some with a rose tint. Diam. 3—5 mm. Thickness 1—3.5 mm.

- : 83—86. Nearly square, short and broad bone-plates with one indentation. One side is smooth, and here the ends are rounded. The other side is more coarsely worked with some abrasive substance, and this side is covered with a brown film, possibly the residue of some glue?
- : 87—90. Square bone-plates with 2 or 3 indentations, all on one side. Like the preceding group, one side smooth and convex, the other flat and rough.
- : 91—99. Nine long and broad bone-plates with three indentations, all on one side. One side convex and smooth, the other flat and rough.
- : 100—112. Bone-plates of medium width, decorated with an incised, diagonal cross. Ends rounded-off on one side.
- : 113—123. Plates of approximately the same length and width as the preceding group. Ends rounded on one side. No indentations or other marks.
- : 124—163. Fragmentary bone-plates, probably mostly of previous type.
- : 164—184. Broad fragmentary bone-plates, some fragments with indentations.

Skeleton IX. K. 2143: 1—24.

- : 1—7. Irregularly pointed bone splinters.
- : 8. Fragments of bone needles.
- : 9. Small semiglobular bone.
- : 10. Fragment of turquoise pendant.
- : 11—24. Small marble beads.

Skeleton XXI. K. 2149 a.

20 beads of corroded brucite-bearing marble. Diam. 6 mm. Thickness 1 mm.

Skeleton XXII. K. 2136. Mark .

- : 1. Potsherd.
 - : 2—53. Thin white marble beads. Diam. 5—6 mm. Thickness 0.8—1.2 mm.
 - : 54—66. Marble beads, white or reddish. Diam. 3.5—4.5 mm. Thickness 1.5—2 mm.
 - : 67—71. Groups of beads in situ in the soil. : 67, 9 beads close together. : 68, 4 beads close together and one isolated. : 69, 5 beads close together and one isolated. : 70, 4 beads close together. : 71, 7 beads close together, 3 isolated. Some of these beads are much worn.
 - : 72—78. Bone-plates in situ in the soil. : 72, a group of three plates, of which two have with certainty and the third one probably one indentation in the middle of one side; three isolated fragments. : 73 together with a minute bone 2 plates, both with one indentation. : 74, 2 plates, both with one indentation facing opposite directions. : 75, four plate-fragments in disorder, at least one with one indentation. : 76, 2 plates, both with one indentation. : 77, 2 plates, both with one indentation, facing opposite directions. Also two fragments, both with one indentation. : 78 2 plates, both with one indentation.
 - : 79—83. 4 isolated plates with 3 indentations on one side and one on the other. One plate with 3 dents on one side and 2 on the other.
 - : 84—108. 25 plates, all with one dent.
 - : 109—117. 9 plates without dents.
- In addition, 18 fragments with one dent, and 35 obsolete fragments.

Plan XXIII, XXIV. K. 2140.

- : 1. Small stone chisel.
- : 2—3. Long, turquoise beads. : 2. Diam. 3.5 mm. Length 9 mm. : 3. Diam. 4 mm. Length 6 mm.
- : 4—14. White marble beads. Diam. 3.5 mm. Thickness 1.5—3 mm.

Skeleton XXV. K. 2129.

- 13 miniature bone cowries (7—11.5 mm. in length).
- 1 bone bead (5 mm. in diam., 4.5 mm. in length.)

Skeleton XXXIII. K. 2137.

- : 1—36. Marble beads, mostly white, some with a reddish tint. Diam. 3—4.5 mm. Thickness 1—2.3 mm.
- : 37—54. Group of bone-plates in situ, in the matrix of soil hardened with gum arabic.
 - : 37, 7 plates, each with one dent, all facing the same way. : 38, 2 plates, each with an engraved V formed by incised lines, and in the midst of this figure a lateral indentation. These patterns face different ways (Pl. 26). : 39, 3 minute plates without dents. : 40, 2 plates, each with dents, facing opposite ways. : 41, 2 isolated minute plates, no dents. : 42, 3 minute plates, no dents. : 43, one plate, with same incised design as : 38 but much obscured by corrosion. : 44, single small plate, no dent. : 45, two plates, each with a dent, facing opposite ways.
 - : 46, 7 minute plates, no dents.
 - : 47, 2 fragmentary minute dents.
 - : 48, 1 minute plate, no dents.
 - : 49, 1 fragmentary minute plate.
 - : 50, 1 fragment.
 - : 51, 2 minute plates, no dents.
 - : 52—54, each one minute plate, no dent.

Near Skeleton XXXIV, at a somewhat higher level. K. 2130.

- : 1—13. White marble beads.
- : 14—20. Minute bone-plates. Length 9.5 mm. Width 2 mm. Thickness 0.5 mm. 5 plates quite smooth, 1 with two deep indentations on one side, 1 with a shallow furrow all along one narrow side.

Underneath Skeleton XXXVI. K. 2145.

- : 1. Wax-green steatite bead, 43 mm. long. Described in »Prehistory» page 129, Frontispiece 2,10.
- : 2. Amazonite pendant described in »Prehistory» page 128, Frontispiece 2,18.
- : 3—44. White marble beads. Diam. 4—5.5 mm. Thickness 1—2.5 mm.

Skeleton XXXIX. K. 2142.

- : 1. Big lancet group.
- : 2. Small lancet group.

- : 3—5. Loose lancets.
- : 6—17. Marble beads, white to pale red. Diam. 3.5—4.5 mm. Thickness 1.2—3.5 mm.

Skeleton XXXII. K. 2126.

Ten small white marble beads (one dissolved for test in hydrochloric acid.) Diam. 4 mm. Thickness 1—2 mm.

Skeleton XXXII. K. 2148: 1—52.

- : 1—3. Small bones.
- : 4—5. Small bone cowries, one considerably bent. Length 12.5 mm. Width 6.5 mm.
- : 6—52. Very tiny marble beads, white or reddish. Diam. 2.5—4.5 mm. Thickness 1—2.5 mm.

Skeleton XXXIII. K. 2146.

1 bone cowrie. Length 18 mm. Width 9 mm.

20 pale-rose-coloured marble beads. Diam. 4—7 mm. Thickness 1—2.2 mm.

Skeleton XXXV. K. 2128.

1 very long and slender bone cowrie. Length 21 mm. Width 8 mm. Thickness 5 mm.
1 oval bone bead. Length 7 mm. Diam. 5 mm.

21 marble beads, mother-of-pearl white to rose. Diam. 3—5 mm. Thickness 0.5—2.3 mm.

Skeleton XXXV, continued excavation. K. 2144.

- : 1—4. Big bone cowries.
- : 1. Length 22 mm. Width 9.5 mm. This specimen is unique in that it has not only the two conical holes at the two ends, but in addition a narrow, cylindrical, transverse hole.
- : 2. Length 18 mm. Width 9.5 mm. Elegantly smooth.
- : 3—4. Length 15 mm. Width 10—11 mm. Much corroded.
- : 5—10. Small marble beads.

Skeleton XXXVI. K. 2127.

69 marble beads. Diam. 4 mm. Thickness 0.8—1.8 mm.

2 bone cowries. Length 14 mm.

Skeleton XXXVII. K. 2147.

1—41 Whitish marble beads, a few small ones, most of them of medium size. Diam. 5.5 mm. Thickness 1.5 mm.

K. 2141: 26. 1.7 m. from peg c in the direction W 15° S. 93 cm. below zero.

- : 1. Very big bone cowrie, flat, neatly polished all over. Length 28 mm. Width 11 mm. Thickness 4.5 mm.
- : 2—3. Small turquoise pendants. : 2. Nearly circular, with a central perforation. Diam. 8 mm. : 3 lamellar, with perforation at the narrow end. Surface partly covered with a rust-coloured substance.
- : 4—26. White marble beads. Diam. 3—4.5 mm. Thickness 0.7—3 mm.

K. 2132. All these marble beads were excavated within a small area $0.4 \times 0.3 \times 0.3$ m. at H of the section fig. 3.

179 big beads. Diam. 5 mm. Thickness 4 mm.

381 smaller beads. Diam. 4—5 mm. Thickness 1—2 mm.

K. 2139. »Flint-bone-knife». Probably belongs to Skeleton XXV. (p. 14)

: 1. Flint-bone-knife.

: 2. Turquoise pendant described in »Prehistory» page 129, Frontispiece 2,2.

: 3—7. Five small marble beads.

K. 2134. Burial place, spot not stated. Mark :

5 plates with incised V and in its centre an indentation.
(one lacks the dent).

19 minute plates, no indentation.

16 fragmentary minute plates.

Summary of field observations on the Chu Chia Chai burial site.

The Chu Chia Chai cemetery offers a complicity of problems which places it in a group by itself as contrasted with all the other prehistoric burial sites excavated by me. When we compare these burials with those of Yang Shao Tsun, Hsin Tien, etc. we find that, with the exception of Chu Chia Chai, they are all quite regular. The skeletons may be lying upon their dorsal side in a nearly horizontal position, as shown by Yang Shao Tsun and Hsin Tien, or else they form »Liegende Hocker» as in the case of the large Pien Chia Kou burial; in all these cases they are quite undisturbed, with every element of the skeleton in its proper position and with the mortuary urns standing as they were placed at the time of the interment of the dead.

At Chu Chia Chai the burials are almost all more or less disturbed, some of them in a very violent way. Some, as for instance Skel. IV, XII, XXVIII, XXXII XXXII, are relatively undisturbed, but most of the others are dislocated in a very strange fashion. Examine, for instance, Skel. IX, Fig. 9, or all the burials represented by Fig. 14—21, or read the descriptions of Skel. XXXVIII and XXXIX, and you will find burials depicted which have in some way or other been very violently dislocated.

The important question is how this confusion of bones arose. One alternative is that the confused order is original, in other words that the dead bodies were cut up and dismembered. During the early part of the excavation I worked upon this hypothesis with vivid recollections of the primarily disturbed condition of the bone-heap in the Sha Kuo T'un cave in SW Fengtien. In favour of this idea reference may be made to Skel. XI, in which I believe that I saw indications of the effect of fire upon one of the human bones, as was so frequently found in the Sha Kuo T'un cave deposit. But the evidence furnished by Skel. XI, is not beyond dispute and it is an absolutely isolated case; I feel therefore that it should rather

be ruled out of the discussion. Another fact that might be referred to in this connection is the apparent absence of the feet in Skel. XXI and XXXVII, but I am under the impression that those small bones are among the first to be dissolved and disappear thanks to leaching by acid water, such a process having entirely removed the bones in the Ssu Shih Ting cemetery.

Another alternative is the possibility of later burials or rifling having interfered with graves that were once quite regular. I think that there is hardly any substantial evidence to support such a view. Intrusive burials or rifling would not have interfered with nearly all the graves, as is the case at Chu Chia Chai.

After considering these alternative explanations I have come to the conclusion that we have here the effect of a slight landslide, probably caused by an earthquake of moderate strength. It is well known that Kansu is one of the most active earthquake areas in China, ranking among the principal seismic centres of the world.

In Juni 1923 I travelled in NE Kansu through the epicentre of the formidable earthquake of December 16, 1920. Here the whole landscape was radically altered by the movement of soil, which took place on a tremendous scale as a surface effect of the earthquake upon the easily moved masses of loess. It would only need a very moderate earthquake to cause a small slide within the loess soil of Chu Chia Chai.

This explanation seems to satisfy all the actual observations: the effect upon nearly all the burials, though with widely varying intensity, and specially the crushing and overturning of practically all the mortuary urns, a feature that could hardly be explained as the work of any other agency.

In text-figure 5 are indicated with crossed squares sherds of the pot Pl. 1,4, with empty squares such of Pl. 4,4 and with triangles those of Pl. 2,4. They all indicate a movement from NE to SW.

DESCRIPTION OF THE FINDS.

POTTERY FOUND IN THE BURIAL SITE.

Pl. 1,1 (K. 5913). Skel. VI, big pot.

This is the best preserved of our Chu Chia Chai ceramics and at the same time a somewhat unexpected find, representing a Middle Yang Shao type in a dominantly Late Yang Shao association.

The ware is brick-red, the surface is paler; possibly there is a thin slip beneath the paint.

In shape the vessel belongs to Palmgren's form-type P. S. XVIII (Palmgren Pl. IV, 1, VI, 4, 6, IX, 4, 7.) The body is nearly globular but truncatedly pear-shaped in the lower half. The collar is of medium size and medium height.

Total height of the vessel 218 mm. Diam. 224 mm. Diam. of bottom 110 mm. Diam. of collar 92 mm. Height of collar 55 mm.

The painted décor refers this vessel to the décor family 13 P in Palmgren's very elaborate system. In brief, it may be said that the main features are two groups of three garlands of the «death pattern» spread over a black background. The middle one of

these is complete, that is to say, black dents project both from above and from below so as to touch, in a symmetrical pattern, the central violet brown band. The upper garland has black dentations only on the upper side and the lowermost garland only on the lower side. The vessels described by Palmgren Pl. XIV, 5 and 9 in painted décor most closely resemble our urn. Moreover, these vessels have both unilaterally and bilaterally dentated death-pattern garlands. Further, the general outlay is similar in the three urns, except that in the Palmgren urns the junction of the two groups of garlands is below the lug and opposite to it, whereas in our vessel the junction is sideways with reference to the lug.

In the triangular interspaces below the junctions of the garlands there are 3—4 almond-shaped spaced-out figures to which there is no counterpart in the Palmgren urns.

On both the Palmgren urns the collar is decorated in trellis design. The collar of our urn is painted with two black bands from which rise vertical spine-like triangles. Inside, at the margin of the collar, there are minute black spines turned downwards.

In every feature, shape as well as décor, this vessel is definitely Middle Yang Shao.

Fig. 22. Saw-teeth pattern, inside collar of K. 2094.



Pl. 2,2 (K. 2094). From an early period of the excavation, »Chang's pot».

Ware pale brick-red. Surface paler, yellowish. Total height 185 mm. Diameter 187 mm. Diam. of bottom 107 mm. Height of collar 55 mm. Diam. of collar 84 mm.

In general outline, especially the very broad base, this vessel comes near to the one described above. But the collar is narrower and higher. There are three narrow lugs just below the equator.

The painting is partly effaced.

The main painted design consists of four spirals, which as a unique exception run anti-clockwise, not clockwise, as do other spirals of the Yang Shao mortuary urns.

These spirals are of a very advanced type approximating to the dissolution of the spiral which we witness on the Ma Chang urns, whereon the spirals are transformed into circles.

The spiral design is here represented by a broad violet-brown frame encircling chess-board and trellis patterns filling up the circular centres of the rudimentary spirals. On the death-pattern nothing is left in the spirals. The only remaining death-pattern is to be found in a concentric design of violet-brown and black encircling the base of the collar.

In the triangular interspaces there are black angular belts.

Below the spiral zone there is a horizontal violet-brown band and below it a black wavy line.

Half-way up the collar is a violet-brown horizontal band, and above and below it are black triangles turned downwards.

Inside margin of the collar is a black saw-teeth pattern (fig. 22).

Pl. 3,3 (K. 5914). Li-Mafu-pots. 1.0 m. from peg c in the direction W 15° N. Uppermost part 12 cm. below zero.

Urn of slender build with tall neck and two lugs just below the collar. Ware brownish-grey. Surface greyish-yellow. Height 196 mm. Diam. 173 mm. Diam. of bottom 77 mm. Height of collar 55 mm. Diam. of mouth 72 mm.

The main feature of the painted design is the spirals running clockwise, and it should be noted that there are in this vessel only *three*, not *four* spiral centres, as is the rule among the mortuary urns of Pan Shan type. The paint is very much obscured; nevertheless it is evident that the spiral curve is composed of central violet and lateral black bands without serrated dentations, which occur only as a belt round the base of the collar.

In the spiral centres there are two pairs of straight lines crossing each other at right angles and forming 9 more or less rectangular figures.

Underneath the spiral zone there is a straight violet-brown line running round the vessel.

Violet-brown bands, one outside the collar near the base and one inside the collar near the margin.

Pl. 3,8 (K. 6380). Bought in Chu Chia Chai.

Urn with low, wide mouth. Attached to the collar two lugs. Margin of collar raised as a serrate contour over the upper attachment of the lug. Far down beneath the lugs two knobs, which are divided by a vertical rift into two halves.

Painting very much obscured but well brought out in Pl. 3,8.

The design resembles Pl. 3,3, but the main figures in the spiral centres are subdivided into smaller rectangles.

Pl. 3,6 (K. 6150). 19/10. The policeman's second pot. 5.6 m. from peg d in the direction E. 0.41 m. above zero.

Urn both in shape and painted design resembling Pl. 3,8, but the painted decor of collar is different. Very little left of the painted design. All we can say is that the main design consists of big spirals. Well below each lug is a group of three small knobs with deep fossae on their upper side. Height 125 mm. Diam. 176 mm. Diam. of bottom 92 mm. Diam. of mouth 111 mm.

Pl. 3,7 (K. 5916). 15/10. »Policeman's afternoon pot 1». 0.95 m. from peg c in the direction E 35° N. Uppermost part 6 cm. below zero.

General shape of vessel like that of Pl. 3,8 but the collar is narrower, and only one lug is attached to the collar. The second lug low down at the equator.

Painting mostly obliterated. Main design: spirals sloping to the right, painted in black and brown. Height 150 mm. Diam. 176 mm. Diam. of bottom 72 mm.

Pl. 4,3 (K. 6383). Bought in Chu Chia Chai.

Urn in shape and design like Pl. 3,3, but the spiral centres filled with an intricate system of rectangular figures.

Height 233 mm. Diam. 200 mm. Diam. of bottom 95 mm.

Pl. 2,3 (K. 6378). Bought in Chu Chia Chai.

Ware gray in the centre, oxidized brown near both the outside and the inside. Thickness of wall at collar 6 mm.

Upper part of urn globular in shape, lower half truncatedly pearshaped. Two lugs below the equator. Collar nearly cylindrical, 48 mm. high, 77 mm. in diam. Total height of vessel 216 mm., diam. 175 mm.

The lower half of the painted area with a coarse trellis pattern: brownish-black, crossing diagonal bands with brown dots in the rhombic interspaces. Upper half with alternating black and brown horizontal bands. Collar with a brown band at the base and a black band at the top. Between these two bands a black zigzag band.

Pl. 1,2 (K. 6145). 19/10. 5.0 m. from peg d in the direction E 15° N. 10 cm. above zero.

Broad, low vessel with wide mouth.

Height 158 mm. Diam. 216 mm. Diam. of bottom 105 mm. Diam. of mouth 176 mm.

Two small lugs rising slightly above the margin. Painting in two colours: brownish-black and brownish-violet. The violet forms a frame: a broad band below, a broad band round the collar, and four vertical columns in pairs standing at the sides of lugs and extending down to the basal vertical band. The main design is three large rhombi on each side between the lugs. The rhombi are filled with trellis design. The interspaces between the rhombi are filled with small rhombi painted violet, spaced out rectangles and trellis-filled triangles.

Inner margin of collar with violet-black saw-teeth pointing downwards.

Pl. 7,2 (K. 6149). Above zero. Spot not exactly stated. Fragment of a large urn. The painted design somewhat similar to that of Pl. 1,2. But the use of the pigments is different. The trellis rhombi are framed in with violet-brown; all the rest of the design is in brownish-black, extended in the form of saw-teeth touching the violet frames of the rhombi.

Pl. 3,1 (K. 6147). 0.25 m. from peg o in the direction N 30° E. On a level with the peg.

In shape like K. 6380. The painting is very obscure and seems to have been carried out only in black. The lugs are painted in a characteristic and unique design (Pl. 3,1, upper fig.)

Height 141 mm. Diam. 159 mm. Diam. of bottom 93 mm. Diam. of mouth 92 mm.

Pl. 3,4 (K. 2098). 14/10. «Policeman's pot». 1.38 m. from peg c in the direction N 37° W. Uppermost part of pot 49 cm. above zero.

Low, broad urn with wide mouth. Height 120 mm. Diam. 151 mm.

Painted design very obscure. At the base of the collar a broad violet band. All other painting in black.

Pl. 4,4 (K. 5911). Skel. I.

Upper half of medium-sized urn with very low, wide collar, to which are attached two small lugs.

Painting very badly effaced, executed in black and violet-brown. A horizontal band covering lower half of collar and the four vertical columns separating the fields with rhombi are in violet-brown. All the rest in black.

To this upper part fits a bottom K. 6296: 1.57 m. from peg 12 in the direction E 6° S, 0,72 m. below peg.

Pl. 1,4 This is one of our most intricate finds, as fragments of this vessel were found at no less than nine different spots within the burial site:

K. 2088: 1, 2. Skel. XXXXV.

K. 2105: 1. Three painted sherds. Slightly W from Skel. XXXXVII.

K. 2108: 4, 5. Near Skel. XXXXIII and XXXXV.

K. 2120: 261. Bought in Chu Chia Chai.

K. 5917. Skel. XXXXIII.

K. 6291. Spot not exactly stated.

K. 6295. Skel XXXX.

K. 12.120: 1. Skel. XII. (Not indicated on the map fig. 5).

K. 12.125: 2. Sherd found by Li 15/10. Spot not stated.

These scattered finds seem to support my idea that a landslide has disturbed this site. Three of the finds K. 2120: 261, K. 6291 and K. 12.125: 2 can be ruled out as the exact

finding places are not stated. Skel. XXXIII, XXXV and XXXVII are close together in the northermost part of the excavation near peg d. Skel. XXXX is a metre south from the said group. Skel. XII is 4.5 m. SW from the main group of skeletons. Skel. XII was excavated earlier than the others, so that this sherd was the first one to be found.

This is one of the large vessels found in the Chu Chia Chai burial site. Height 228 mm. Diam. 240 mm. Diam. of the bottom 100 mm. Diam. of the low collar 224 mm.

Just below the collar a pair of lugs.

The painting is executed in two colours, brown-black and violet-brown. The latter colour was used for the six vertical columns, consisting of one brown and one black half. The small rhombi inserted between the trellis rhombi are also painted violet-brown, and the sawteeth and the garland design inside the collar are painted likewise brown. All other painting is black with a tint of brown. Two black and brown vertical columns stand flanking the lugs and extend to the black band at the base of the collar. Two more similar double columns stand half-way between the lugs. In this way are formed four main fields, each decorated with four large rhombi filled with trellis lines and five small rhombi filled with brown paint. Above the lugs are large vertical fields framed by the columns and filled with coarse trellis design. Coarser still is the trellis covering the outside of the collar.

Beneath the broad black band at the base of the painted zone is a thin garland in black.

A faint remnant of the death pattern is seen in the double columns where the black half projects a few spines into the brown half.

A typical very late Yang Shao vessel.

Pl. 3,5 (K. 6143). Skel. VI, 'the small pot'.

Small urn with wide mouth and one lug at the collar. Height 97 mm. Diam. 124 mm. Diam. of bottom 70 mm. Diam. of mouth 94 mm.

The half of the vessel below and round the lug has lost nearly all its paint, but one small remnant seems to indicate that this half was painted like the part shown in Pl. 3,5. If this interpretation is correct, there were four nearly vertical death-pattern columns framing four fields filled with trellis pattern.

Violet-black was used for the central band in the vertical death columns and in the horizontal band round the lower half of collar. The rest of the painted design is in brownish black. In fact the two pigments are in this case so similar that it is difficult to distinguish between them on this much effaced specimen.

Pl. 6,2 (K. 2091). In northern wall of the excavation. Below zero.

In general shape and design like Pl. 3,5 but provided with two small, nearly horizontally placed lugs at the base of the painted area. Of the collar only a fragment, showing that it was higher and narrower than that of Pl. 3,5.

Pl. 6,5 (K. 5912). Skel. XXXIV.

Medium-sized broad urn with wide low mouth and two small lugs at the collar. Height 139 mm. Diam. 184 mm.

Apart from some spots of paint on the collar the only intelligible painted designs are faint vertical columns flanking and extending below the lugs.

Pl. 2,4. This is another of those scattered finds which was traced under the following headings:

K. 6148. Skel. XXVII.

K. 12. 114: 1. 45 cm. NW from and 15 cm. above Skel. XXI.

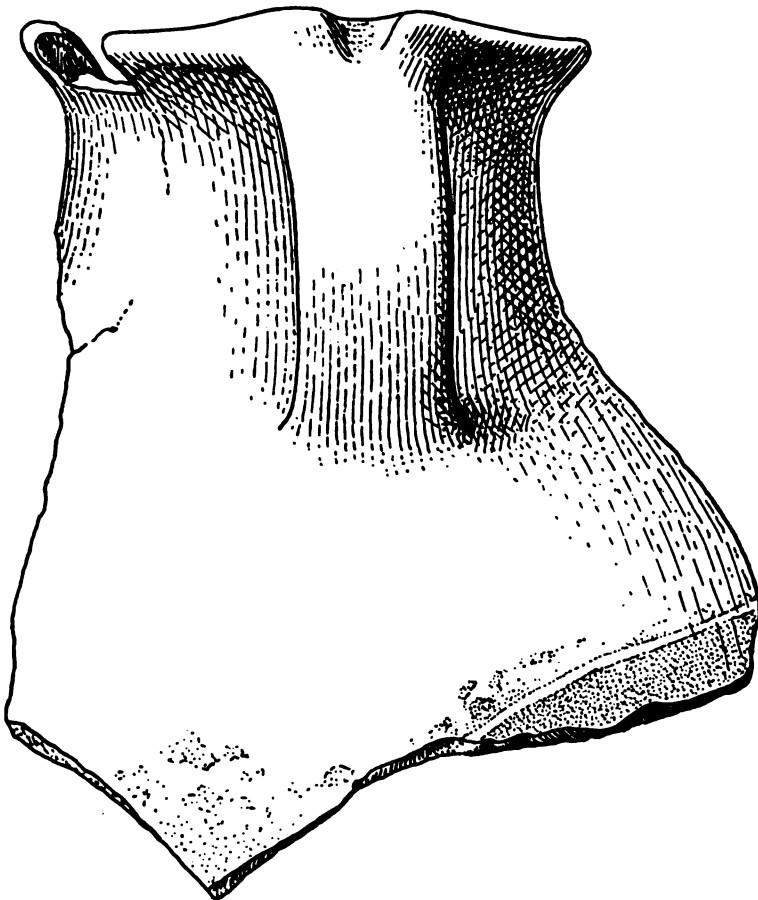


Fig. 23. Fragment of high-collared urn. K. 12.128: 1.

K. 12.120: 2. Skel. XII.

K. 12.122: 2. Skel. XII.

In all probability the following also belongs here:

K. 2114. Skel. XXXII.

As we see from fig. 5, Skel. XII and XXVII occur close together. Skel. XXI is also not far from the other two. In these three cases all the sherds certainly belong to one vessel and the displacement is beyond any doubt. Skel. XXXII is 3 m. distant from the main group. This large fragment (K. 2114) is very similar to the others, but there seem to be minute differences in dimensions; furthermore there are no direct fittings, so that possibly this specimen should not be connected with the others.

This specimen was a broad urn (height 185 cm., diam. approximately 263 cm.) with low, wide mouth and possibly only two knobs at the equator instead of lugs.

Within very large and somewhat irregular rhombi framed by well pronounced death patterns there are twelve small rhombi, every other one filled with trellis design and the remainder with a very large black dot in the centre.

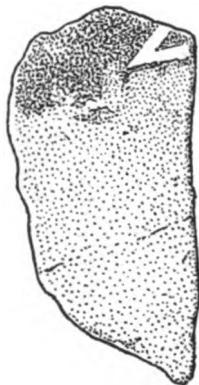


Fig. 24. Small sherd with angular design.
K. 12.128: 2.

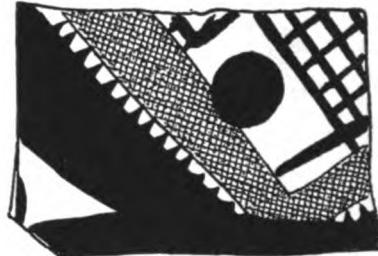


Fig. 25. Small sherd, possibly belonging to
Pl. 2,4. K. 12.128: 3.

The collar carries a simple angular, winglike design.
The two pigments are pure black and brown.
Middle Yang Shao type.

K. 12.128: 1—3. 3.2 m. from peg d in the direction S 24° E. 0.97 m. above zero.

: 1. Belonged to a large urn with high, narrow neck and painting in black and narrow white lines (text-figure 23).

: 2. Small sherd with angular design. (text-figure 24).

: 3. Small sherd which may possibly have belonged to Pl. 2,4. (text-figure 25).

K. 12.116. 2.15 m. NW from peg. 3. 0.2 m. above the peg. Belongs possibly to Skel. VIII.

Sherd of a Middle Yang Shao mortuary urn. Round the base of a lug there is a strong zigzag death pattern (text-figure 26).

K. 2086. Found in the refuse earth. Possibly belonging to Skel. XXXXII.

K. 2090: 1—4. Behind the head of Skel. XXXXII.

Fragments (text-figure 27) of a small urn of a soft, gritty ware. Painting in black with the design spaced out. It consists of groups of three straight lines terminating abruptly.

K. 2106: 5. 19/10. 5.0 m. from peg d in the direction E 15° N. 10 cm. above zero.

K. 12.121. 15/10 Li 1. 1.6 m. from peg d in the direction S 43° W. 31 cm. below zero.

K. 12.127. 15/10 Li 2. 1.30 m. from peg d in the direction W 35° S. 7 cm. below zero.

These three lots may belong to one urn, though the first one was found far away from the others. These sherds are so much worn that little more can be said than that they were adorned with a trellis design, which was placed not diagonally but horizontal-vertically.

K. 12.125: 1. Excavated by Li 15/10.

Small marginal sherd with lug painted in Late Yang Shao style.

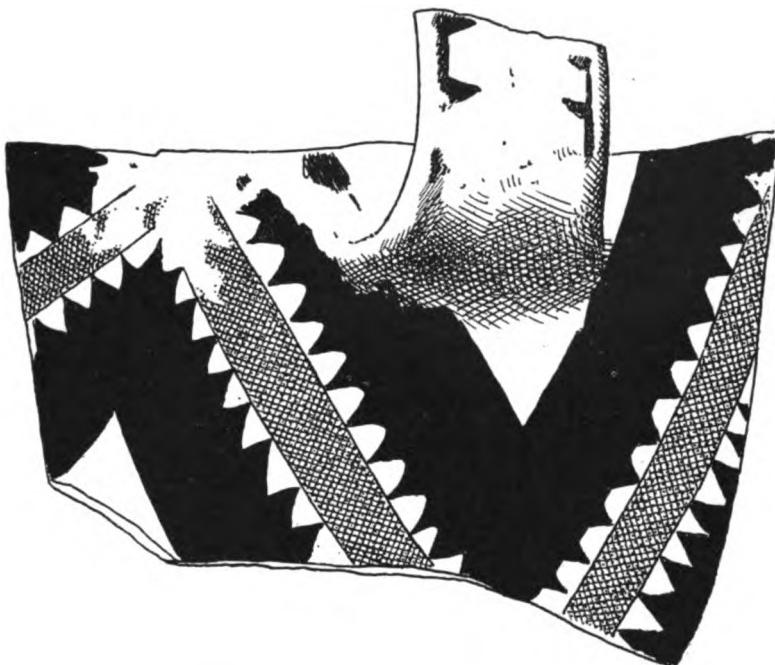


Fig. 26. Sherd of Middle Yang Shao urn. K. 12.116.

Pl. 2,1 (K. 6146). Belongs to Skel. XXXXVI or XXXXVII.
Medium-sized broad urn with wide low cylindrical collar, to which are attached two lugs. Height 160 mm. Diam. 199 mm.

A horizontal violet-red band at the base of the collar. All the rest of the painting in brownish-black.

The main design consists of horizontal bands provided with thornlike serrations. The uppermost black broad band, running concentrically below the red band on the collar-base, projects thin, sharp black spines into the red band, the whole forming a death-pattern.



Fig. 27. Fragments of small urn with spaced-out design. K. 2090: 1.

Below this broad black band are three narrower concentric bands. The two upper ones project broad brownish black spines both upwards and downwards, the lowest only upwards. Here it is not the painted parts, but the spaced-out interstices which give to the eye the impression of a pattern, a pattern of zigzag lines.

Outside this collar a diagonal trellis and inside, at the margin, a simple garland décor.

Pl. 5,3 (K. 2100). One of the Li-Mafu pots. 1.0 m. from peg c in the direction W 15° N. Uppermost part of pot 12 cm. below zero.

Height 116 mm. Diam. 144 mm.

Urn resembling in shape Pl. 2,1 but the lugs are larger.

No trace of the painted design except spots that have survived from a black band below the collar.

Pl. 5,5 (K. 2102). 15/10. Policeman's second afternoon pot. 3.2 m. from peg c, in the direction N 15° E. 40 cm. above zero. Urn like Pl. 6,5. No trace of paint.

Pl. 5,1 (K. 6385). Bought in Chu Chia Chai.

Small urn with very narrow foot. Collar with black slip.

Pl. 3,2 (K. 2103). Skel. XXXXI.

Small urn, restored from many small fragments.

Ware brick-red. On a red slip a black meander pattern. The interspaces filled with a minute net-design. Height 80 mm. Diam. 112 mm.

Pl. 4,5 (K. 2096). Bought in Chu Chia Chai.

Slender urn with high, slightly flaring collar. Two lugs at the equator. Height 183 mm. Diam. 138 mm.

Painting above the lugs only, and consisting of horizontal, alternating black and violet-red concentric bands.

Pl. 4,1 (K. 2093). 18/10. Policeman's morning pot. 2.15 m. from front of skull XXXXII in the direction N 34° W. Uppermost part 40 cm. below zero.

Height 214 mm. Diam. 176 mm.

In shape resembling Pl. 4,3, but the collar is slightly wider. Lugs just below the equator. Painting very obscure. On a level with uppermost part of lugs a horizontal red band. Above this a zigzag pattern consisting of a central red zone surrounded by narrower black bands.

Pl. 4,2 (K. 6293). 14/10. »Chang's pot«. 3.65 m. from peg d in the direction S 42° E. 0.55 m. above zero.

Big urn with low wide mouth. Two handles at the widest part of the vessel. Height 232 mm. Diam. 255 mm.

Ware brick-red. Thickness of wall 7 mm.

On the collar indications of very irregular painting in rustbrown pigment.

Pl. 4,6 (K. 6144). Skel. XXIX.

Urn below medium size. Collar not very wide and low. At the collar one lug pierced by a conically bored hole.

The urn is decorated with 8 vertical groups, each of three brown lines. Short vertical brown lines also inside the collar.

Height 157 mm. Diam. 165 mm.

Pl. 4,7 (K. 2097). Skel. XIII.

Small urn with narrow, high collar, to which is attached a big lug. Height 126 mm. Diam. 113 mm.

The vessel was painted in white, of which some traces remain, as is shown on the plate.

Pl. 7,6 (K. 6202) 15/10. »Policeman's pot in two halves». 2.3 m. from peg c, in direction N 30° E. Bottom 14 cm. above zero.

Urn resembling Pl. 4,2 with low mouth and two lugs at the widest part of the vessel. Ware light brick-coloured. Thickness of wall 8—9 mm. No traces of painting. Height 203 mm. Diam. 222 mm.

Pl. 1,3 (K. 2151) 14/10 »Chen's big urn». 2.62 m. from peg d in the direction S. 5° E. 0.67 m. above zero.

Ware brick-red. Urn mended before burial. Side profile with sharp bend at one third of the height. Mouth wide. Collar low and indistinct. Two fairly high lugs rising to mouth.

Height 160 mm. Diam. 209 mm.

Pl. 5,6 (K. 2099). Beneath the feet of Skel. XII.

Upper half of an urn with narrow high neck, at the sides of which two tall lugs with a button near the top.

Ware coarse, grey in the interior. Surface yellowish grey.

Pl. 5,4 (K. 2101). E side beneath Skel. XX.

Small broad urn with mouth and rounded contour. Medium-sized lugs, rising to the margin. No trace of painting.

Height 114 mm. Diam. 124 mm.

Pl. 6,1 (K. 2095). 15/10. »Li afternoon pot». 2.3 m. from peg d in direction W 30° S. 16 cm. below zero.

Very coarse small vessel with one lug just below the margin. Ware grey, coarse. Side wall and bottom covered with partially obliterated mat-impression.

Pl. 6,3 (K. 2104). »The policeman's small pot». 4.95 m. from peg o in direction E 40° N. Standing, upper margin 10 cm. above zero.

Small grey urn, irregular in shape and consisting of very coarse greybrown ware. Fragment of one lug, probably rather big.

Height 110 mm. Diam. 107 mm.

Pl. 7,7 (K. 5915). Above Skel. III.

Large urn of brick-red coarse ware, rich in mineral grains.

Height 295 mm. Diam. 230 mm.

Collar narrow, high, near the mouth slightly flaring. Round the base of collar an impressed line. Two lugs at the widest part of the vessel. The remaining lug adorned with longitudinal superimposed bands. Traces of a horizontal superimposed narrow band on a level with uppermost part of lug.

Pl. 7,9 (K. 2156). Skel. XXIII or XXIV.

Large fragmentary urn, made of coarse material and of irregular shape. Ware grey, coarse with numerous mineral grains. Two lugs, irregularly placed, one lower than the other. Upper part missing. Surface covered with crossing string-impressions.

Pl. 7,4 (K. 2154). 17/10. Chen's pot. 3.6 m. from peg c in direction W 20° N. Standing, mouth 1.10 m. below zero.

Urn of dark-grey, very coarse ware. Two lugs at the sides of the low collar. Outside covered with partially obliterated mat-impressions.

Height 180 mm. Diam. 182 mm.

Pl. 7,3 (K. 6292). Skel. XXVII.

In shape like the preceding urn, but without lugs, and the mouth slightly wider. Entire vessel covered with mat-impressions.

Height 167 mm. Diam. 181 mm.

Pl. 7,8 (K. 2153). Skel. XVI.

Small urn of grey coarse ware. Shape like Pl. 7,4 but only one lug at the collar. Surface irregular and rough.

Height 153 mm. Diam. 165 mm.

Pl. 7,5 (K. 2155). 0.25 m. N 35° E from peg 3. Bottom of urn on a level with the peg.

Urn of grey, very coarse ware. One lug at the collar and two horizontal elongate knobs at the widest part of the vessel. Surface rough and irregular. Triangular impressions on the outside of the margin of the collar.

Height 196 mm. Diam. 205 mm.

Pl. 7,1 (K. 2152). 18/10. »Chuang's pot». 2.55 m. from peg d in direction E 5° S. Bottom 15 cm. above zero.

Urn of pale brick-red, very gritty ware. The narrow collar is of medium height, slightly flaring at the mouth. To the collar is attached a lug. On the opposite side of the vessel is another lug low down at the equatorial zone.

Height 192 mm. Diam. 199 mm. Mouth of collar 77 mm. wide. Diam. of bottom 92 mm.

K. 6300. 19/10. »Policeman's pot-bottom». 5.85 m. from peg d in the direction E 10° S. 0,9 m. below zero.

Bottom of small pot of pale brick-red ware with big mineral grains. Faint indications of painting in black and violet brown.

K. 6301. 17/10. »Mafu's pot-bottom». 4.68 m. from peg d in the direction W 10° S. Bottom 28 cm. below zero.

Bottom of medium-sized urn of grey ware, pale brick-red both inside and outside. Traces of brown paint.

K. 6297. 15/10. »Policeman's pot-bottom». Centre of vessel 2.37 m. from peg c in the direction N 28° W. Bottom 15 cm. above zero.

Bottom of a coarse vessel of brownish-grey ware. Thickness of wall 6 mm. Side wall with criss-cross string impressions. Bottom with string impressions and square stamp marks.

K. 6298. Skel. III.

Bottom of a vessel of grey, gritty ware with very big quartz grains. Wall 5—7 mm. thick. Outside and bottom with linear impressions. In the same lot also three small sherds of various types, one with painting in black and red.

K. 12.124. 0.6 m. from peg b in the direction W 15° N. 10 cm. above the peg.
Bottom of large coarse urn with criss-cross lines on underside of bottom.

K. 2082. 15/10 1923. «The policeman's black potsherd». 2.15 m. from peg c in the direction E 35° N. Lowest part 35 cm. above zero. Sherd of upper part of coarse unpainted vessel.

K. 2084. 2.6 m. from peg o in direction N 5° E. Uppermost part 0.48 m. above zero.
Large fragment of a vessel with low, wide mouth. Ware grey, rich in mica. Vessel very irregular, both inside and outside very rough.

K. 2113: 1—6 (Text-figure 28). 2.9 m. from peg c in the direction W 20° N. Uppermost sherd 65 cm. below zero.

Fitted together into three fragments which do not fit but which certainly all belong to one vessel.

Ware coarse, rich in quartz grains. Colour of ware chocolate brown in the interior, grey near the surface.

Collar low (12 mm.) and wide.

Equatorial part covered with mat-impressions. The collar adorned with a single row of vertical impressions, 6—7 mm. long.

Below the collar there was a zone exhibiting a singular and unique design consisting of impressions of the same type as those upon the collar but arranged each group in two double rows, which together form a cross.

K. 12.129. 77 cm. from peg c in the direction W, 30 cm. below zero.

Marginal fragment of grey monochrome urn with mat-impressions.

K. 12.131: 1—9. Skel. VIII.

Sherds belonging to at least 5 vessels.

One sherd from an unpainted vessel with wide collar, 28 mm. high.

Another sherd of a painted vessel with much effaced rhomboid pattern.

The other small sherds quite obsolete.

K. 2083. 2 m. from peg o in the direction N 10° W. 0.82 m. above zero.

Very small urn. Ware probably brownish but surface nearly black. A superimposed equatorial band with two knobs. Between this band and collar in irregular interspaces three incised crosses.

K. 2109. Skel. XIX.

Sherd of a coarse unpainted urn.

K. 12.118: 1—2. To the left of Skel. XX.

Bottom fragment of two urns, one small, one large.

K. 2117: 1—7. Burial place. New digging. Various spots.

Sherds of no particular interest.

K. 2118: 1—6. Above peg 14.

Obsolete sherds, some of painted vessels.

K. 2081: 1—3. Skel. XXXIII.

Three small obsolete sherds, one with painting.

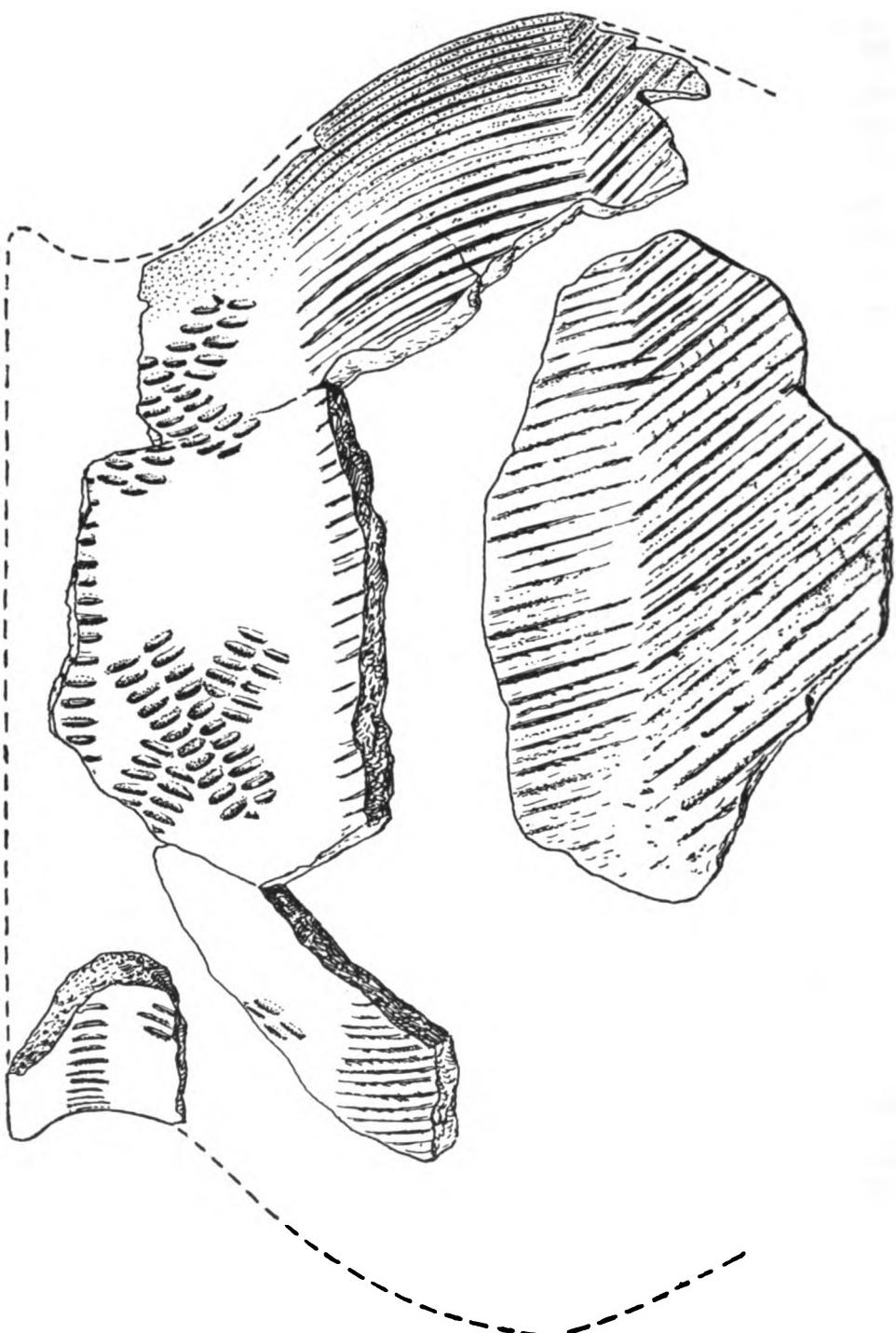


Fig. 28. Approximate reconstruction of K. 2113: 1-6.

K. 12.112: 1—3. Skel. XX.
Small obsolete sherds.

K. 2150: 2—4. Skel. V, together with beads.
Three small sherds, two of unpainted grey pottery. The third sherd shows the base of the collar with a horizontal violet band at the collar-base.

K. 2107. Belongs to Skel. XVI.
Unpainted sherd, probably belonging to lowest part of a large painted urn.

K. 2112. Skel. XXXXV.
Four small sherds, probably belonging to four different vessels. One covered with black showing a spaced-out triangle.

K. 2087. Skel. XVII.
Sherd of bottom part of an unpainted vessel.

K. 12.126. 3.8 m. from peg c in the direction N 9° E. 0.65 m. above zero.
Small sherd with obscure painting.

K. 2085. 4.30 m. from peg c in the direction N 15° W. 30 cm. above zero.
Small equatorial sherd of big urn. Painting only in black.

K. 2080: 1—9. Burial place. Various sherds collected by Li 18/10.
Some painted, one much waterworn.

K. 2089: 1—7. Burial place, spot not exactly stated.
Fragment of upper part of small urn. The rest obsolete sherds.

K. 2111. 1.50 m. from peg o in the direction N 10° E. 30 cm. above zero.
Big sherd, strongly incrusted and showing traces of painting.

K. 6299. 18/10. Near Chuang's pot.
Bottom-fragment and side-fragment of a coarsely painted pot. Three small sherds of another pot.

K. 2116: 1—11. Skel. XXII.
Small insignificant sherds, some painted.

K. 12.117. Skel. XIII.
Fragment of lower half of a small painted pot.
Ware and surface reddish yellow. Thickness of wall 4—5 mm.
Lowest zone of sidewall unpainted. Above this zone there is another with much obliterated brownish-red painting in filled triangles and rhombi.
Late Yang Shao or Ma Chang.

K. 2092: 1—2. Burial place. Extensive digging, place not exactly noted.
Two insignificant sherds of a vessel of brickred- ware.

K. 12.119. 1.68 m. N 10° W from peg 7. 0.35 cm. above the peg.
Equatorial sherd of unpainted urn.

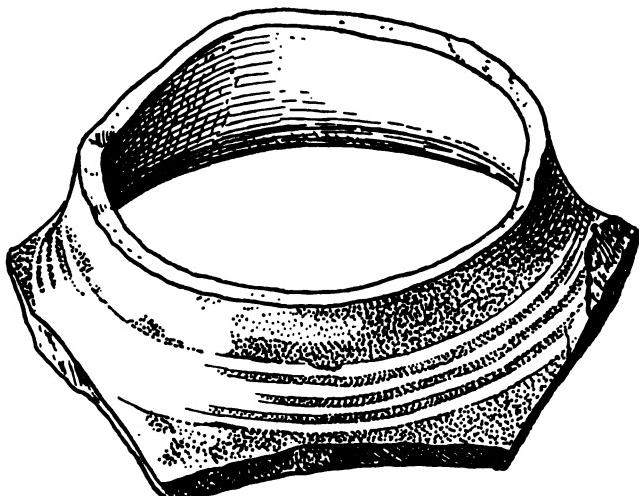


Fig. 29. Collar-base of K. 2110.

K. 2110. (Fig. 10). Burial place. Site not stated.

Two sherds together forming the base of the collar of an urn (fig. 29) which probably very closely resembled Pl. 4,7.

It seems as if the vessel was covered with a white slip, upon which was painted three narrow bands in a brown-violet pigment with spaced-out white narrow bands between. Above and below this group of four white and three brown narrow bands there are broad zones of the same brown colour.

K. 2115. (Fig. 30) 50 cm. from peg c in the direction W 20° S. 26 cm. below zero. Small marginal sherd of a fairly large urn.

Ware very light reddish yellow. Surface cream-coloured. Wall 4—5 mm. thick.

Collar 35 mm. high. On the inside margin black garlands. Outside the collar are painted double triangles, one standing, one suspended with the apices confluent. These triangles were painted twice. First the triangular contour was painted in thin violet-brown pigment, and then the triangular surface was carelessly covered with thick black.

At the base of the collar there is a horizontal zone painted in thick violet-brown. This violet band is overlapped from above by the black of the triangles and from beneath by black narrow linear sharp dents rising from a violet-black horizontal band, of which little is preserved. Between the large black triangles there are spaced-out rhombi showing the cream-coloured surface of the slip. Small spaced-out rhombi are also seen between the black dents beneath the violet band.

Late Yang Shao.

K. 2136: 1. Skel. XXII, together with bone-plates and beads.

Small marginal sherd of a painted vessel. Ware yellowish grey. Thickness of wall 4—5 mm. Collar wide and low, painted on inside of margin with a black garland. Outside the collar black horse-shoe figures, and further down at the base of the collar a violet-brown horizontal band, which is not continuous. Below this oblique long and narrow dents, forming together with the violet band a degenerate death pattern. Type very late Yang Shao or Ma Chang.

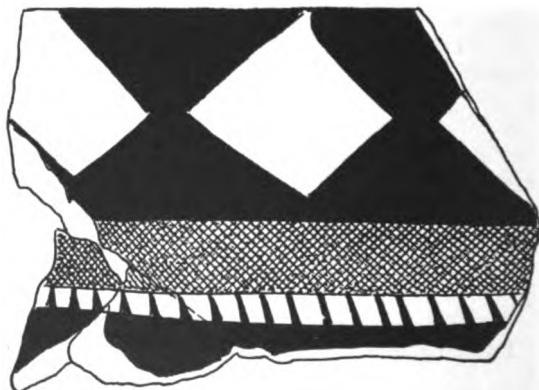


Fig. 30. Collar of K. 2115.

K. 12.113. Skel. XX.

High and narrow collar of a medium-sized urn.

Ware light-grey with straw-yellow surface. Wall 4—5 mm.

At the very base of the collar a horizontal reddish-brown band. Above this band the entire outside of the collar shows traces of a much obliterated black trellis pattern.

A noticeable feature of this collar is two minute lugs at the upper margin. Diam. of collar 65 mm. Height 60 mm.

K. 12.123: 1. Skel. XXIX.

Uppermost part of a large urn. Collar of moderate height, 94—98 mm. in diam., height 42 mm. On one side a lug reaching from base of collar to near the margin.

Painting largely obliterated before the incrustation of the much-worn fragment. The collar was originally adorned with a sparse trellis pattern painted in black.

There is also a fragment, K. 12.123: 2, which, to judge from the ware, surface and thickness of wall, may have belonged to the same vessel. The entire outer surface is painted in black and a small spot of violet covered with a broad figure in black. A small spaced-out triangle.

K. 12.130: 1. (Fig. 31). 1.58 m. from peg 10 in the direction W 37° N.

Upper part of pot on a level with zero.

Uppermost part of a large urn. Diam. of collar 98—100 mm. Height of collar 48 mm.

On one side of the collar there is a lug ranging from a little below the collar to half of its height.

Ware deep brick-red, covered on the outside with a straw-coloured slip. Thickness of wall 3—5 mm.

The inside of the collar is painted with a red band at the margin, and below this band an irregular garland in black, as shown in fig. 31. The outside of the collar is covered with a coarse trellis design. At the base of the collar a horizontal brownish-red band, which passes over into the painted design of the body of the vessel. Of the body itself, only small parts are still attached to the collar.

Round the basal red band of the collar there runs at a distance of a few millimetres a black band 17 mm. broad, from which narrow oblique dents run to meet the red band in death-pattern fashion. Below the black zone there are fragments of death pattern and other designs which seem to indicate that the main design of this vessel was large spirals (apparently three (?) in number).

Under the head number 12.130 there are 5 further small sherds (: 2—6). : 3—6 are insignificant sherds of some monochrome vessel. : 2 is a small sherd recalling the painted bands of Ma Chia Yao.

K. 2111. 1.5 m. from the peg o in the direction N 10° E. 30 cm. above zero.

Big sherd of a painted vessel. The painting in black and red is almost completely obliterated.

DWELLING-SITE POTTERY.

All specimens with sub-numbers under the head-number K. 2055, amounting in all to 835 objects, were derived from my servants' excavations under the houses in the northern part of Chu Chia Chai village. The specimens under the head

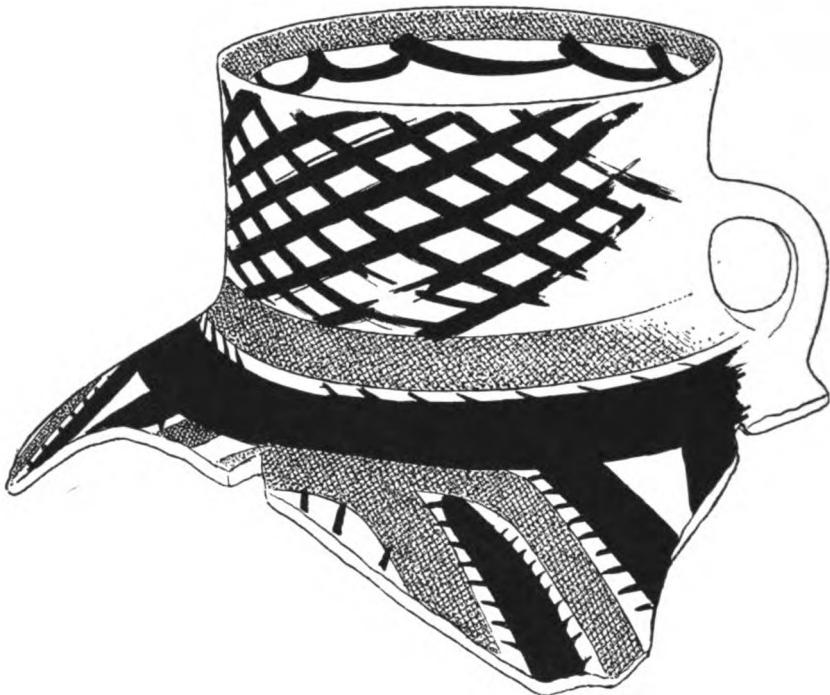


Fig. 31. Collar und uppermost part of body. K. 12.130: 1.

number K. 2119 were also dug up by my men. Those under head number K. 2120 were bought from the villagers.

All the painted pottery from this dwelling site is described in my »Prehistory of the Chinese» P. 152—159, Pl. 100—106.

Here below are described the specimens of unpainted pottery.

Pl. 8,8 (K. 2055: 50) Urn with low wide mouth and one lug crowned by a crest at the margin of the mouth. Lower half of vessel truncatedly pear-shaped.

Height 180 mm. Diam. 188 mm. Diam. of mouth 125 mm. Diam. of bottom 93 mm.

Pl. 5,2 (K. 6151) Excavated by my collector Chen NW from the southern houses of Chu Chia Chai. As it is an isolated find and rather unique in shape, it is by no means proved that it belongs to the Chu Chia Chai site.

In general shape this vessel may be compared with Pl. XV. 1, 3—7 and XXXVIII of Palmgren's »Kansu mortuary urns». But the cylindrical collar is lower and the shape of the body more depressed.

On the upper half of body there are four pairs of regularly circular pits. One of these pairs is fully visible in Pl. 5,2 and a glimpse of two other pairs is noted left and right close by the contour. Just above these two pairs and just below the collar are seen two prominences which are quite regularly square-cut and give the impression of showing their original shape. However, at the top of the collar above each of these prominences

there is a scar, manifestly indicating the attachment of a lug. If this interpretation is true, the prominences below are only the bases of lugs which have crumbled away owing to the loose gritty nature of the ware.

Height 142 mm. Diam. 172 mm. Height of collar 40 mm. Diam. of collar 79 mm. Diam. of bottom 70 mm.

Pl. 8,1 (K. 2055: 131) Bottom-sherd of a very large vessel with unusually thick wall. Ware chocolate-brown. Wall 20 mm. thick near bottom, 11—12 mm. thick in highest part of fragment.

Bottom, 110 mm. in diam., carefully smoothened. Side-wall roughened in a characteristic way.

Pl. 8,3 (K. 2055: 298) Lower part of an urn, also a fragment, K. 2055: 297, Pl. 11,2.

Ware grey in the centre, brick-red near both inside and outside, which seem to have been smeared over with a brick-red slip. The outside of both bottom and side-wall is covered with basket pattern, mainly horizontal but crossed over by a diagonal basket design.

Thickness of wall 6 mm.

Pl. 11,7 (K. 2055: 104) Fragment of lower part of side wall and small part of bottom.

Ware rich in grains of quartz and flakes of mica. Inner half of wall grey, outer half oxidized, pale brick-red. Outside brick-red, inner surface grey. Wall 9 mm. thick.

Outside covered with nearly vertical mat-impressions.

Pl. 12,2 (K. 2055: 119) Sherd of sidewall of a large vessel. Ware as well as inside and outside intensely brickred. Ware rich in particles of quartz and mica. Thickness of wall 7—9 mm.

Outside covered with some kind of coarse textile pattern, diagonal to nearly vertical. This design is crossed over by three superimposed clay bands with neat finger impressions.

Pl. 12,3 (K. 2055: 271) Marginal fragment of basin. Ware grey in centre, brickred in outer zones. Thickness of wall 6—7 mm. Surface brick-red.

Inner surface as well as upper side of the flaring rim smooth, almost polished. On the outside a much obliterated string(?) -pattern.

Pl. 11,3 (K. 2120: 292) Marginal sherd of an urn with wide mouth.

Ware pale brick-red, full of quartz grains. Thickness of wall 5—6 mm. One or two lugs.

The rich profile of the collar (fig. 32) has been worked by a rotary action. For the purpose of draining away water remaining in the fossa on the top of the collar there is a vertical hole (fig. 33). Outside, at the base of collar, a superimposed clay band with oblique impressions.

On the outside of side-wall, deep mat-impressions.

Pl. 9,9 (K. 2055: 144) Small marginal sherd of a vessel with very wide mouth. Profile of the mouth like that of Pl. 11,3 (fig. 34).

Ware and whole vessel light grey.

Signs of rotary action upon the collar. At the base of collar deep fossae. Mat-impression on the side-wall.

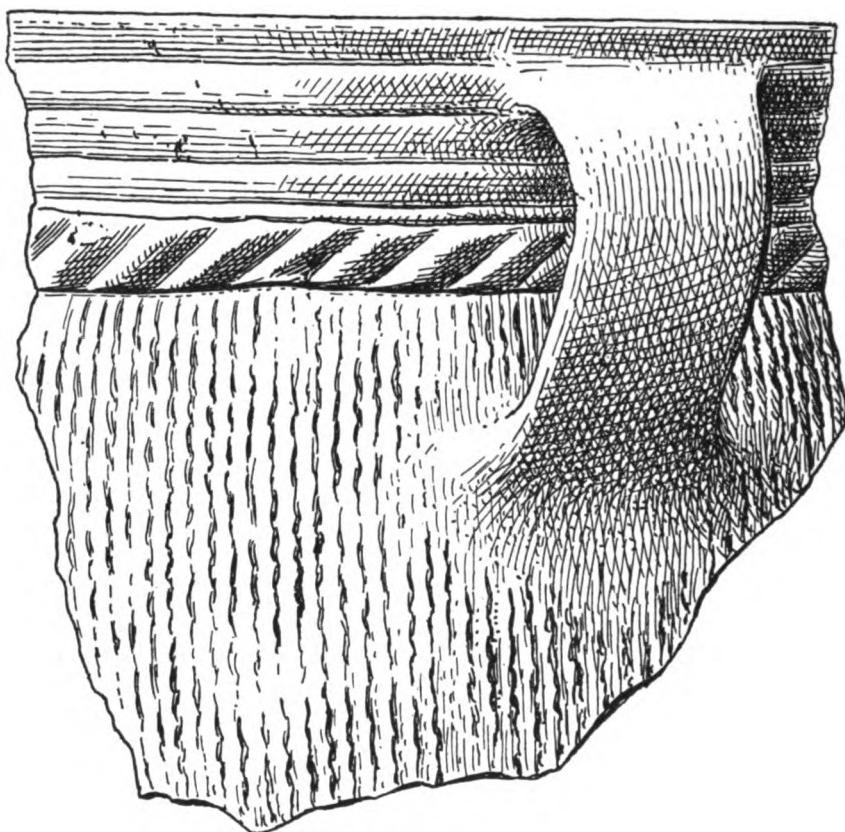


Fig. 32. K. 2.120: 292.

Pl. 9,7 (K. 2055: 152) Marginal sherd of a large thick-walled vessel. Ware reddish-brown. Inside and outside grey. Wall 18 mm. thick.

The collar is swollen in its lower half and is here adorned with oblique finger impressions.

Pl. 11,1 (K. 2055: 9) Marginal fragment of a large, probably rather bulbous vessel.

Ware reddish-brown. Outer surface grey, inner surface brownish grey. Wall 5—7 mm. Lug covered with four superimposed clay bands with finger impressions.

Pl. 11,5 (K. 2055: 7) Sherd of a large vessel with lug. Ware grey, full of grains of quartz, feldspar and mica. Wall 10 mm. thick.

Wall and lug covered with some kind of textile(?) impression.

On a level with the two attachments of the lug there are two superimposed clay bands.

Pl. 9,10 (K. 2055: 102) Marginal sherd of an urn.

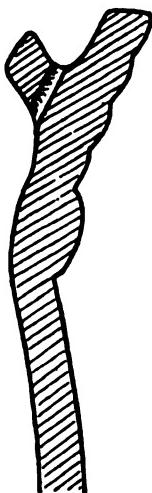


Fig. 33. K. 2120: 292. Section of collar.

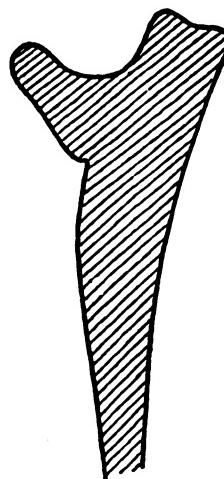


Fig. 34. K. 2055: 144. Section of collar.

Ware brownish grey, full of mineral grains. Wall 5 mm. thick. Outside of collar and side-wall covered with mat impression.

Pl. 9,1 (K. 2055: 184) Marginal sherd of an urn.

Ware brownish-red. Wall 6—8 mm. thick. Outside sooty grey. Inside reddish light-grey.

Pl. 10,7 (K. 2055: 340) Marginal sherd of an urn.

Ware brown, tending to black in the collar. Wall 5 mm. thick.

On the side-wall a mat-impression, which is smoothed out close below the collar.

Collar with rotary marks upon its upper half, deep impressions in the lower.

Pl. 11,6 (K. 2055: 344) Marginal sherd of a vessel with incised double ridges outside the collar. Ware brown. Wall 4—5 mm.

Pl. 10,11 (K. 2055: 114) Marginal sherd of a very thick-walled vessel.

Ware and surface grey. Wall 18 mm. thick. Heavy triangular protuberances at the base of the collar.

Pl. 12,22 (K. 2055: 338) Marginal sherd of urn, probably globular in shape and in relief décor resembling Pl. XXI, 9 of Palmgren's monograph. In both cases the superimposed narrow wavy lines are all turned one way, sloping to the left.

Ware is chocolate brown. Wall 5 mm. thick. The low, strongly flaring collar is cut by short, deep incisions at the margin.

Pl. 12,8, 20, 21 and Pl. 10,8 show the same relief décor. Pl. 12,21 shows a horizontal band at the base of the diagonal ones, like Palmgren's Pl. XXI, 9.

Pl. 12,8 has a vertical rudimentary lug and Pl. 10,8 a ridge-shaped handle incised at the margin.

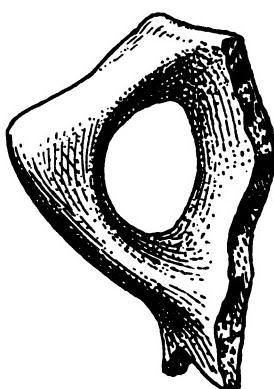


Fig. 35. Lug of K. 2120: 273.

Pl. 9,6 (K. 2055: 32) Marginal sherd with a lug, across which a relief band with three fossae.

Ware yellowish red. Vessel smeared over with a slip, inside red, outside blackish-grey.

Pl. 10,2 (K. 2119: 191) Sherd like Pl. 9,6 but with the transverse relief band at the top of the lug.

Pl. 12,23 (K. 2055: 33) A similar specimen, but smaller, with the transverse band near the top of the lug.

Pl. 12,1 (K. 2119: 205) A specimen like the preceding ones with a dentated bar across the upper half of the lug. An innovation is a transverse row of very deep pits at the base of the lug.

Pl. 10,6 (K. 2055: 6) Fragment of a vessel with a row of four deep pits at the top of the lug and a single pit just above the centre of the lug.

Pl. 10,12 (K. 2055: 5) Specimen with mark V across the lug.

Pl. 12,10 (K. 2119: 176) Specimen with a very narrow lug.

Pl. 12,6 (K. 2120: 273) Specimen with a lug of angular outline (fig. 35).

Pl. 12,4 (K. 2055: 348) (Fig. 36) A very remarkable specimen of »black pottery«. Ware greyish black. Wall 3 mm. thick. The collar bent outwards to a flat horizontal position. Lug small, adorned near the top with a longitudinal pit deepening upwards.

On the outside of the side-wall are two horizontal ridges, one at the base of the lug, one at widest part of the vessel. Between these are diagonal ridges. The inside and outside of the entire vessel is smoothed. Inside slightly polished, pitch-black.

Pl. 11,4 (K. 2055: 311) Marginal sherd of a bowl of »black pottery».

Ware dark-grey. Wall 4 mm. thick. Margin slightly thickened, rounded.

Pl. 9,2 (K. 2055: 38) Upper part of an urn with high flaring collar, to which is attached one high lug (probably two). Ware light grey. Wall 4 mm. thick. Surface grey, smooth.

Pl. 9,3 (K. 2055: 37) Uppermost part of urn like that in Pl. 9,2, but collar less flaring, nearly cylindrical. One lug and the upper attachment of the other preserved. Near upper end of lug a pair of deep pits. Ware grey, surface smoothed.

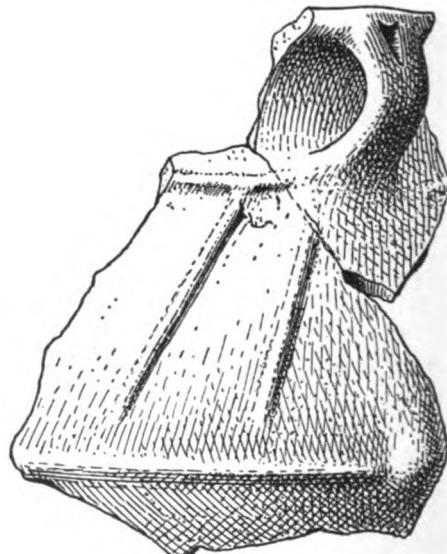


Fig. 36. K. 2055: 348.

Pl. 9,4 (K. 2055: 41) Uppermost part of an urn, in shape like Pl. 9,2 and 3, but smaller. Ware pale brick-red. Outside and inside of collar covered with a glossy brown slip.

Pl. 9,11 (K. 2120: 297). Large urn of same family as the three preceding ones. Ware intensely brick-red. Wall 8 mm. thick.

Pl. 10,5 (K. 2119: 184) Urn of same family as the four preceding ones. Margin forming a sharp ridge above the lug. Thick glossy brown slip.

Pl. 12,9 (K. 2119: 198) Small urn of same type as the five preceding ones. Thick red slip.

Pl. 10,1 (K. 2055: 186) Urn of same family as the six preceding ones. Lug unusually slender and high. Brown slip.

Pl. 10,3 (K. 2120: 294) Another urn with high and slender lug. Ware grey. Surface somewhat roughened.

Pl. 10,4 (K. 2055: 35)) Urn like the group described above. Ware brown. Surface sooty black.

Pl. 10,9 (K. 2055: 343) Marginal sherd of a vessel with low, wide mouth. 26 mm. outside the collar a concentric ridge, outside which a pit 6 mm. in diam.

Pl. 11,8 (K. 2120: 287) and Pl. 12,7 (K. 2055: 231) These are two sherds of Chi Chia age. Pl. 11,8 is from a large urn of the type of Pl. 39,2—3 in my «Prehistory of the Chinese». Pl. 12,7 is from a quite small urn like Pl. 37,3 of the said work. I have no doubt that these two specimens are actually of Chi Chia age, which means that they were old already when the Chu Chia Chai people settled here, antique objects once left on the spot by some Chi Chia emigrants.

Pl. 9,5 (K. 2119: 40) A very thick-walled object of hour-glass shape. Ware brick-red, smeared over with grey paste. Big cavity in the upper part and small cavity in the bottom.

Pl. 9,8 (K. 2119: 36) A solid object of brick-red ware. Possibly a leg of a Ting tripod.

Pl. 10,10 (K. 2119: 35) A hollow object. Outside covered with a glossy brown slip. Possibly the leg of a Li tripod.

Pl. 12,18 (K. 2055: 267) Marginal sherd of a bowl. Ware grey in centre, brickred near both surfaces. Upon the outside a pointed knob bent slightly downwards.

Pl. 12,5 (K. 2119: 135) Bottom part of an urn, probably in shape like Pl. 6,4. The unique feature of this vessel is its horizontal contour, which is not circular but oval.

Pl. 12,11—13, 15—17, 19 (K. 2055: 313, 535. K. 2119: 41. K. 2055: 314, 319, 317, 318).

Sherds of pottery, painted or unpainted, cut into a roughly circular shape. We do not know the true nature of these pottery discs. One guess is that they are unfinished pieces

of spinning whorls, though some thin and curved pieces (fig. 15, 19) do not fit well into that description. Some specimens (such as fig. 13 and 17) show considerable wear. Fig. 17 is bored into from both sides, but the two borings have not met.

Pl. 12,14 (K. 2119: 38) is a piece of burnt clay with flat sides, 23 mm. apart. It might have been intended for use as a polisher, though the flat sides show no wear.

Fig. 37 (K. 2120: 199) is a similar piece, which seems to have been a polisher as the big side is much worn.

We now propose to describe some vessels bought from the villagers of Chu Chia Chai and said to have been found in the soil of the village.

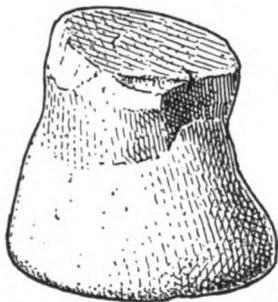


Fig. 37. K. 2120: 199.

Pl. 6,4 (K. 6386) An urn of red ware, closely resembling some mortuary urns from Ch'ia Yao and Hsia Hsi Ho, »Prehistory of the Chinese» Pl. 144. As these two localities of the Ch'ia Yao stage are only a few kilometres distant from Chu Chia Chai, it might be surmised that this specimen (and another, K. 6306 to be described below) were originally specimens from Ch'ia Yao or Hsia Hsi Ho.

This however, is emphatically contradicted by the fact that fragments which very [probably] belong to this type of urn, Pl. 9,2—4, were found in the dwelling-site deposit of Chu Chia Chai, and another such fragment, Pl. 5,6, was excavated with skel. XII of the Chu Chia Chai village cemetery. How this contradiction is to be explained I am not at present able to state.

Pl. 8,6 (K. 6306) An urn similar in shape to the preceding one but made of dark grey ware.

Pl. 8,7 (K. 6307) Urn of reddish ware but with the surface a sooty black. Over the upper half of the lug there is a transverse ridge in relief. Half-way between the bases of the lugs is a round knob.

Height 130 mm. Diam. 140 mm.

Pl. 8,4 (K. 6203) Urn of same type as the preceding one, but ware dark brownish grey. The transverse relief ridge over the upper part of lug has three deep pits. Knobs halfway between the lug bases. Over the equatorial belt irregular vertical lines scratched in the soft clay.

A black slip over the outside of the collar.

Pl. 8,2 (K. 6303) Ware brick-red. Shape like that of the preceding, but the relief ridge on the lug is without pits. Surface a sooty black.

These three urns Pl. 8, 7, 4 & 2 show us nearly complete specimens of a type which is represented by marginal sherds from the excavations in the Chu Chia Chai dwelling-site deposit (Pl. 9,6. Pl. 10,2).

Pl. 8,10 (K. 6384) Grey coarse gritty ware. Upper half of body hemispherical, lower half truncatedly pear-shaped. Collar low, decorated with vertical lines which are broader and deeper towards the base of the collar. The entire body covered with a diagonal linear pattern. Instead of lugs, two knobs below the equator. Height 233 mm. Diam. 227 mm.

Pl. 8,5 (K. 6387) Simple and crude pear-shaped vessel. Mouth very wide. Just below it, two knobs. Height 147 mm. Diam. 109 mm.

Pl. 8,11 (K. 6381) Vessel of brick-red ware like Pl. 7,7 but smaller, and the lugs placed lower.

Pl. 8,9 (K. 6181) Broad urn resembling in shape Pl. 2,1 and several other Chu Chia Chai vessels. Surface reddish, variegated.
Height 130 mm. Diam. 195 mm.

STONE OBJECTS.

Pick-axe of unique shape.

Pl. 17,3 (K. 2053: 11) A stone instrument of unique shape. A central part, considerably thicker than the two extremities. This central part is rounded rectangular in cross-section with a broad shallow pit on the side shown in the figure.

The one extremity, which turns upwards, is partly broken off, but was probably broadly rounded.

The other extremity is largely chipped off, but there are indications that it was attenuated and provided with an edge.

Length 123 mm. Rock of a dark colour, probably igneous.

Symmetric axes or chisels.

Pl. 17,4 (K. 2120: 3) Small axe of dark, dense rock. Sides and back square-cut.
Length 92 mm. Width at the edge 38 mm.

Pl. 18,12 (K. 2120: 4) On the neck of this chisel, which was bought from the villagers, there are traces of aniline. The provenance is hardly beyond doubt.

Rock dark, fine-grained.

Length 72 mm. Width 22 mm.

Pl. 18,13 (K. 2053: 12) Dark, fine-grained rock. Thick chisel with rounded rectangular cross-section and square-cut, very obtuse edge.
Length 60 mm.

Pl. 18,7 (K. 2053: 21) Fore part of a chisel of dark-grey variegated crystalline rock.
Edge-part very acute.

Pl. 18,11 (K. 2053: 22) Fore part of a chisel of grey crystalline rock. Edge-part acute.

Pl. 24,5 (K. 2150: 1) Burial site. Skel. V.

Chisel of grey, quartzitic rock. Cross-section irregularly oval.

Length 83 mm.

Pl. 24,1 (K. 2140: 1) Burial site. Skel. XXIII or XXIV. Chisel of grey, crystalline rock. Rear end broken.

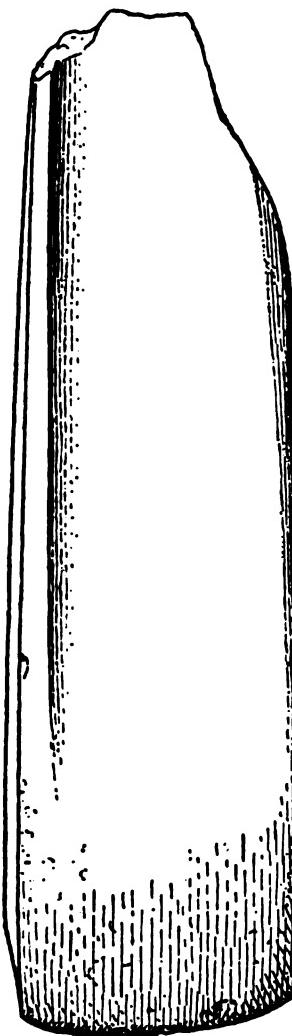


Fig. 38. Cavetto-shaped cuttings of K. 12.115.



Fig. 40.
Cavetto-cutting of K. 2106.

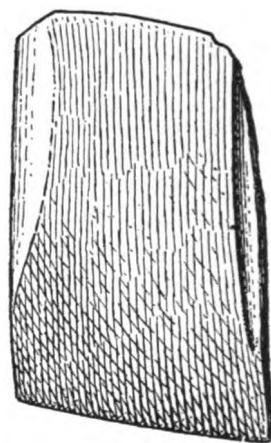


Fig. 39.
Cavetto-cutting of K. 2119: 13.

Asymmetric chisels (adzes).

Pl. 24,4 (K. 12.115) Burial site. 1.85 m. from peg c in the direction W 18° S. 0.76 m. below zero.

The relatively thin rear end is broken. The sides are straight cut with sharp angles. The edge end is highly asymmetrical with one side straight and the other strongly curved.

The elegant but somewhat irregular cutting of this specimen is marked by straight and sharply cut concave, cavetto-shaped contours (fig. 38).

Length 184 mm. Width 37 mm. Rock dark with a brown tinge.

Pl. 18,8 (K. 2119: 13) Short adze of the same dark-brown dense rock as the preceding specimen. The flat broad side shows one deep cavetto-like cutting (fig. 39).

Length 56 mm. Width 34 mm.

Pl. 24,2 (K. 2106) Burial site. 5.0 m. from peg d in the direction E 15° N. 10 cm above zero.

Black, fine-grained crystalline rock. Broad adze, only slightly asymmetrical. One cavetto-shaped contour (fig. 40).

Length 67 mm. Width 37 mm.

Pl. 18,14 (K. 2120: 16) Asymmetrical chisel of brown quartzitic rock. Rear end broken.

Pl. 17,1 (K. 2053: 6) A typical »Pen« of dark, dense felsitic rock. One side nearly straight, the other strongly curved. Neck square-cut.

Length 80 mm. Width 39 mm. Thickness 20 mm.

Pl. 17,2 (K. 2053: 14) Long, asymmetrical chisel of black, schistose rock. Shape irregularly square-cut. Both ends asymmetrical but in planes differing 90° from each other.

Pl. 24,3 (K. 2133: 1) Skel. VI.

Small fragment of greenish-grey jade-like rock. Slightly worked, may have been a chisel, but too small to ascertain the shape.

Various stone objects.

Pl. 18,15 (K. 2053: 18) Well-polished piece of the same dense, liver-brown rock as Pl. 18,8 and Pl. 24,4. Square cut at both ends.

Length 70 mm.

Pl. 18,9 (K. 2053: 59) Pen-shaped fragment of whitish-grey variegated marble.

Pl. 18,10 (K. 2053: 7) Fragment of a greenstone axe?, possibly like Pl. 27,6 in »Pre-history of the Chinese».

Pl. 20,7 (K. 2119: 11) Wellpolished fragment with a cavetto-shaped cutting clearly shown in the figure.

Pl. 18,1 (K. 2119: 19) Nucleus of dark-grey chert.

Pl. 18,2 (K. 2053: 64) Nucleus of dark-grey chert.

Pl. 18,3 (K. 2053: 63) Nucleus of reddish chert.

Pl. 18,4 (K. 2119: 34) Small flat disc of red chert. Chipped all round.

Pl. 18,5 (K. 2053: 10) Flake of opaque chert.

Pl. 18,6 (K. 2053: 69) Flake of translucent chert.

Pl. 19,2 (K. 2119: 12) Fragment of black slate. May have been an axe or chisel but too fragmentary to be identified.

Pl. 19,1 (K. 2119: 9) Fragment of black schist. May have been an object like Pl. 7,3 of »Prehistory of the Chinese».

Pl. 19,4 (K. 2053: 50) Specimen of dark schist.

Three sides, left, top and base, as shown in the figure, produced by sawing. More or less half of the thickness was first sawn through and then the rest was broken off. On the diagonal side is an unintentional fracture.

Pl. 19,3 (K. 2053: 49) Rectangular specimen of black schist. Only one edge (right) exhibits sawing action (not visible in the figure).

Pl. 19,6 (K. 2053: 48) Piece of mica schist, roughly shaped by human action.

Pl. 19,5 (K. 2120: 6) Roughly shaped oval disc.

Pl. 20,1 (K. 2119: 3) Fragment of a quartzite pebble, 40 mm. thick. The smooth and even parallel upper and lower sides seem to indicate that the stone has been subjected to some grinding process.

Pl. 20,2 (K. 2053: 58) Quartzitic sandstone 27 mm. thick. The description of Pl. 20,1 above is referable also to this specimen.

Pl. 20,6 (K. 2053: 57) Grey quartzitic sandstone, 11 mm. thick. Polished on one side only, otherwise like Pl. 20,1—2.

Pl. 20,8 (K. 2119: 1) Rounded pebble, 50 mm. thick, showing polishing action on both flat sides.

Pl. 20,3—5 (K. 2053: 60, 61. K. 2119: 32) Three objects of the same kind of white marble as we know from the Lo Han T'ang site (»Prehistory« Pl. 40,7, 9). There are innumerable small empty pores representing a decayed mineral.

Fig. 5 is a fragment of a slender armlet like »Prehistory« Pl. 40,7.

Fig. 3—4 seem to be fragments of such extravagantly high arm rings as are shown in »Prehistory« Pl. 22,4.

Stone and pottery knives.

Pl. 21,1 (K. 2053: 38) Fragment of a »winged« knife of grey, variegated limestone.

Pl. 21,2 (K. 2053: 32) Fragment of winged knife of dark grey slate.

Pl. 23,1 (K. 2119: 20 b) Half of a winged knife, probably with two holes. Grey slate.

Pl. 23,3 (K. 2053: 39) Small fragment of winged(?) knife of grey limestone.

Pl. 23,4 (K. 2119: 27) Small fragment of lower half of knife of dark-grey slate.

Pl. 21,4 (K. 2053: 33) Fragment of knife of black slate.

Pl. 21,3 (K. 2053: 36) Half of a knife of dark, crystalline rock. Possibly this specimen had no hole, but in its place a deep furrow on either side.

Pl. 22,3 (K. 2053: 26) Half of a rectangular knife of grey, fine-grained quartzitic sandstone. On one side a furrow connected with the hole, on the other side no furrow.

Pl. 23,2 (K. 2119: 20) Knife of grey, fine-grained schistose rock. Rectangular contour, two holes.

Pl. 23,5 (K. 2120: 11) Oval knife of black slate. Two holes.

Pl. 22,2 (K. 2053: 30) Rounded rectangular knife of reddish grey rock. Probably two holes.

Pl. 22,1 (K. 2053: 27) Knife shaped out of a potsherd. Uncertain whether one or two holes.

Pl. 22,4 (K. 2053: 25) Knife of burnt clay. As the specimen is quite flat it seems unlikely that it was made out of a potsherd.

The shape is rounded rectangular. The edge is formed by grinding only from the side shown in the figure.

Pl. 23,6 (K. 2055: 326) The larger part of a knife made out of a potsherd. Edge shaped by grinding on the rearside only.

Pl. 23,7 (K. 2120: 203) The larger part of a knife shaped out of a potsherd. Edge shaped by grinding on the rearside only.

Pl. 23,8 (K. 2053: 324) The larger part of a knife made out of a potsherd. The saw-like edge formed by chipping from both sides.

PENDANTS.

Pl. 24,6 (K. 12.111: 1.) Skel. II a. Turquoise pendant with three borings. Length 21 mm. Width 14 mm. Thickness 3 mm. Pale green, porous but no matrix.

Pl. 24,9 (K. 2133: 2.) Skel. VI. Small triangular turquoise pendant with central hole. Crevices filled with a rust-coloured substance.

Pl. 24,7 (K. 2143: 10.) Skel. IX. Fragment of turquoise pendant. Length 21 mm. Thickness 5 mm. The turquoise is only a thin crust upon a solid piece of black matrix. One biconical hole.

K. 2145: 2. Skel. XXXVI. Amazonite pendant, described in »Prehistory», page 128, frontispiece 2,18.

Pl. 24,11 (K. 2131.) Skel. XXXXI. : 3 Turquoise pendant. A thin sheet of turquoise supported by a thicker body of blackish matrix. Two perforations. Length 20 mm.

: 4 Beautiful turquoise pendant found by Dr. Davidson Black when cleaning the skeleton. Described in »Prehistory», P. 129, Frontispiece 2,6.

- Pl. 24, 10, 12 (K. 2141: 2,3) Small turquoise pendants.
: 2 Nearly circular, with a central perforation. Diam. 8 mm.
: 3 Lamellar pendant with perforation at the narrow end. Surface partly covered with a rust-coloured substance. Length 12 mm.

K. 2139. Probably belonging to Skel. XXV.

- : 2 Turquoise pendant described in «Prehistory» page 129, Frontispiece 2,2.

BEADS.

Bone bead.

Pl. 24,14 (K. 2128.) Skel. XXXXV. : 1. Oval bone bead. Length 7 mm. Diam. 5 mm.

Turquoise beads.

Pl. 24,8 (K. 2138: 1) Skel. III Cylindrical turquoise bead.
Pale green, partly covered with a rusty substance. Length 16.5 mm.

Pl. 24,16 (K. 2131: 2) Skel. XXXXI. Elongated, very irregular bead of green turquoise. Length 9.5 mm.

Pl. 24, 13, 15 (K. 2140: 2,3.) Skel. XXIII, XXIV. Cylindrical turquoise beads, of high polish and lustre.

- : 2 Diam. 3.5 mm. Length 9 mm.
: 3 Diam. 4 mm. Length 6 mm.

Marble beads.

Beads of this type occur with great frequency in the Chu Chia Chai burials, as will be seen from the following list:

Skel. II a.	K. 12.111: 3—9,	Seven beads.
Skel. II b	K. 2149 b.	Six beads.
Skel. V.	K. 2150: 5 : 6—46.	A group of stone beads in situ. 33 are marble beads, 3 consist of a dark stone. Loose beads.
Skel. VI.	K. 12.110: 1—51.	K. 2133: 3—82.
Skel. IX.	K. 2143: 11—24.	
Skel. XXI.	K. 2149 a.	20 beads of corroded brucite-bearing marble.
Skel. XXII.	K. 2136: 2—66. : 67—71.	Loose marble beads. Groups of beads in situ.
Skel. XXIII, XXIV.	K. 2140: 4—14.	
Skel. XXXIII.	K. 2137: 1—36.	
Skel. XXXIV.	K. 2130: 1—13.	
Skel. XXXVI.	K. 2145: 3—44.	
Skel. XXXIX.	K. 2142: 6—17.	
Skel. XXXXI.	K. 2131: 1.	
Skel. XXXXII.	K. 2126: 1—10.	K. 2148: 6—52.
Skel. XXXXIII.	K. 2146: 2—21.	

- | | |
|---------------|--|
| Skel. XXXV. | K. 2128: 1—20. K. 2144: 5—10. |
| Skel. XXXVI. | K. 2127. 69 beads. |
| Skel. XXXVII. | K. 2147: 1—41.
K. 2141: 4—26.
K. 2132: 1—580.
K. 2139: 3—7. |

These marble beads are small and short. Their diameter varies between 2.5 to 7 mm. with an average of about 4 mm. Their thickness is 0.7—4 mm. with an average of about 2 mm.

The largest collection of beads was made at H of text-figure 3. Here we found within a cubic space of $0.4 \times 0.3 \times 0.3$ m. not less than 560 beads of two sizes:

179 beads	Diam. 5 mm.	Th. 4 mm.			
381	»	4-5	»	1-2	»

Fig. 41 reproduces a small part of a necklace. (K. 2150: 5) belonging to Skel. V. The three beads to the left are of an ivory-white colour. The majority, 30 marble beads, are of a dull white colour. Some of these beads are much worn and thin. In between them are three beads (1+2) of some dark stone.



Fig. 41. Part of necklace K. 2150: 5.

Most of these marble beads are white. Quite a number are of a pale red (rose) tint.

BONE AND ANTLER OBJECTS.

Deer antler axe.

Pl. 13,1 (K. 2054: 51) A beautiful deer antler axe with the edge cut only from the side shown in the figure, the back showing only slight wear.

Length 144 mm.

Bone hoes.

Pl. 13,2 (K. 2120: 168) Broad bone hoe, comparable with »Prehistory« Pl. 119,2 from Hui Tsui, but still more worn. Length 118 mm. Cutting of edge strongest from side not shown in figure.

Pl. 14,4 (K. 2120: 193) Bought. Edge part of a bone hoe of concave type. Edge formed on the rear side.

Pl. 13,5 (K. 2120: 177) Concave hoe, more rounded than the preceding one.

Pl. 13,3 (K. 2120: 188) Fragment of pointed bone hoe.

Pl. 14,3 (K. 2120: 192) Rear side of a hoe-like instrument not unlike 14,4 but narrower.

Pl. 14,1 (K. 2054: 2) Fragment of an object like Pl. 14,3.

Pl. 14,6 (K. 2120: 178) Bone instrument of much the same type as the preceding one.

Bone instruments of uncertain use.

Pl. 14,5 (K. 2054: 4) Bone instrument with distal part missing. At a guess, might possibly have served as a comb, as in »Prehistory« Pl.121, 1 & 3 from Hui Tsui.

Pl. 14,2 (K. 2120: 176) Bought. Fragment of a unique instrument provided with slightly curved dents, pleasingly rounded through long wear, and of which not less than 7 or 8 can be traced. After careful study I believe that the instrument was used for some weaving or similar process. This interpretation is based upon the fact that the sinuses between the dents are deeply worn down on the side shown in the text-figure 42, but much less so on the rear side shown in the plate. I believe, firstly, that the instrument was held as shown in the text-figure, and further that threads ran in the sinuses across the front side of the instrument.

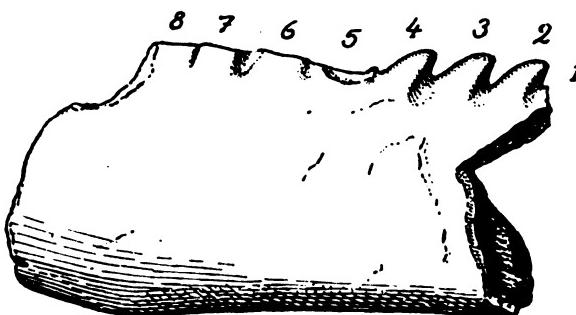


Fig. 42. Dents of weaving(?) instrument. K. 2120: 176.

Broad, pointed bone instruments.

Pl. 13,4 (K. 2054: 6) Fragment of instrument with a broad, chisel-like point.

Pl. 15,10 (K. 2120: 179) Broadly pointed instrument made out of a hollow bone. Length 106 mm.

Bone awls, and sewing needles.

Pl. 15,4 (K. 2054: 35, K. 2054: 36) Two bone awls with the trochlea not at all retouched.

Length of Pl. 15,4 94 mm.

Pl. 15,3 (K. 2054: 37) Small awl. Trochlea rounded off to a hemispherical ending.
Length 80 mm.

Pl. 15,2 (K. 2054: 39) Distal fragment of an awl, possibly of a similar shape to fig. 4 & 5 of the same plate.

Pl. 15,6 & 7 (K. 2054: 41, 40) Slender awls. 15,6, 131 mm. long.

Pl. 16,1 (K. 2054: 23) Broad, short awl made out of a bone splinter.

Pl. 16,3—6 (K. 2054: 19, 16, 24, 15) Awls made out of bone splinters.

Pl. 16,21 (K. (K. 2054: 22) Short awl made out of a bone splinter.

Pl. 16,7 (K. 2054: 14) Regularly rounded awl. 86 mm. long.

Pl. 16,2 (K. 2054: 27) Small chisel-shaped bone instrument.

Pl. 16,20 (K. 2054: 29) Small perforated bone object.

Pl. 16,8—10 (K. 2054: 30, 31, 33) Fragments of sewing needles.

Pl. 16,11 (K. 2054: 28) A unique specimen of considerable interest, as I believe it to be an unfinished sewing needle. Originally it was a slender bone splinter, the longer part of which was attenuated into the slender rounded shape of a sewing needle. In its present state part of the thin end is broken away. Probably the hole for inserting the thread was made before the broad part was broken away.

Cylindrical bone objects.

Pl. 16,13 (K. 2054: 50) Cylindrical object cut from a hollow bone. Ends rounded by wear. Length 60 mm.

Pl. 16,14 (K. 2054: 49) A smallish bone object with square-cut ends. Length 37 mm.

Bone arrow-point.

Pl. 16,12 (K. 11,190) Bone arrow-point with narrow lozenge-shaped cross-section (Fig. 43). Length 85 mm.

Fig. 43. Cross-section of bone arrow-point.



Bone knives with flint flakes.

Pl. 25,1 (K. 2139: 1) Burial site, 1.9 m. from peg c in the direction W 10° S. 90 cm. below zero. May belong to Skel. XXV.

A bone instrument, 254 mm. in length, 22 mm. broad and 5 mm. thick. The broad sides are flat, the narrow sides and ends rounded. The convex narrow side is rounded only to 80 mm. of its length. This part served as a handle. The greater length of this side, 174 mm., is cut by a deep furrow, in which were inserted chert flakes, three of which are still preserved intact.

Pl. 15,8 (K. 2054: 43) The handle part of a knife of same type as the preceding one. The handle is 72 mm. long. Then follows the furrowed part, of which only 37 mm. is preserved. At the handle the beginning of the furrow is very shallow, but soon it reaches a depth of 3 mm.

Pl. 15,9 (K. 2054: 44) Fragment of knife of same type as the two preceding ones, but carelessly shaped. Depth of furrow 2.5 mm.

¹ Pl. 15,1 (K. 2054: 38) Small proximal fragment of an instrument, possibly a knife like Pl. 15,8; might be an awl.

Pl. 16,22 (K. 2054: 46) Small pointed fragment of a knife of the same type as Pl. 25,1. Carefully shaped and polished. Furrow of convex side 2.5 mm. deep.

Pl. 16,23 (K. 2054: 45) Fragment of knife-point like the preceding one. Elegantly polished.

Aggregate of bone lancets.

Together with Skel. XXXIX there was found a group of quite unique bone objects.

Skel. XXXIX is the somewhat euphemistic designation of an irregular group of bones described in the following way: »Furthest NW and uppermost an overturned mandible. 30—80 cm. to SE and 20—60 cm. lower down a group of long bones, and together with them the lancet-shaped bone-plates» (K. 2142: 1). Here were also found 12 small beads (K. 2142: 6—17).

»The long bones» is a right-arm radius-ulna group with numerous bone lancets (Pl. 25,2 K. 2142: 1) and a single left-arm ulna with a long lancet (Pl. 25,3 K. 2142: 2).



Fig. 44. Short bone lancet
K. 2142.

There were also collected three loose long lancets (K. 2142: 3—5), one of which is reproduced Pl. 25,4.

The lancets consist of two types, long and short ones.

Pl. 25,4 is a typical representative of the long lancets. It is 110 mm. long, 9.5 mm. broad and one mm. thick. The pointed end is slightly turned up like a ski. Six of the nine long lancets are bent in this way. Three look perfectly straight.

The lancet described above is cut a little narrower at the rear end. In at least three more specimens I have noticed this narrowing of the rear end.

One more specimen is complete enough to permit of measurements being taken: length 110 mm. width 10.5, thickness 1 mm. This specimen is one mm. wider than Pl. 25,4; otherwise the dimensions are identical.

Everything goes to show that these bone lancets were cut with striking accuracy to fit into a well-conceived pattern.

One further observation should be made. The bottom side of the miniature »ski» is polished flat out to the edges, the top side is more or less broadly rounded at the edges and diagonally striated.

The short lancets are acutely triangular, as shown in fig. 44.

Two specimens were measured:

1.	L. 30	W. 9.5	Th. 1
2.	» 29	» 10	» —

Let us now examine the big bone group Pl. 25,2 (K. 2142: 1). Round the lower two-thirds of the radius-ulna there is, to the right, the main group of lancets, 5 of the long and 7 of the short ones. All the long lancets have their butt-ends turned downwards and the short triangles have their bases turned upwards.

To the left of the group and 2—4 cm. lower there are visible two long lancets in a position corresponding to those on the right side, and in a position corresponding to the triangles there projects to the left an apex, probably that of a triangle.

Turning now to Pl. 25,3 (K. 2142: 2), we find only a fragmentary ulna, close to

which there is a long lancet in exactly the same position as those of the big group.

At a first glance these finds seem to be a kind of bone armour, and as such I described it in my »Children of the Yellow Earth» in the following words:

»The most natural interpretation of these bone splints is surely that they constituted a sort of bone armour, possibly sewn to the sleeves. Considering that these bone splints are very thin, this armour may have been ornamental rather than defensive. A closer examination of this remarkable discovery has not yet been made.»

In my present interpretation I still more strongly emphasize the ornamental character of these bone plates. There is no indication that other parts of the body were protected in a corresponding manner, and it is hard to see why the lower two-thirds of the under-arm should have been given this special protection.

There is still another fact to be taken into consideration. The length of the radius is slightly more than 21.5 cm. and that of the ulna 20.3 cm. In consulting for the purpose of comparison the male skeleton of the Pien Chia Kou grave, we there note a length of 25 cm. for the radius and 24 cm. for the ulna. Guided by these measurements we may feel justified in assuming that the Chu Chia Chai XXXIX skeleton may possibly be that of a woman, an assumption further strengthened by the fact that 12 small beads were found with these bones.

From the position of the bone plates in the big group (Pl. 25,2) we may conclude that the short triangular plates fit in between the points of long bone lancets as indicated in the tentative reconstruction in the text figure 45.

*Small rectangular bone plates.
(Plate 26).*

In my »Preliminary report on archaeological research in Kansu» (1925), page 14, I briefly mentioned a group of small bone objects found in some of the Chu Chia Chai burials. Some crude line drawings were also given. The note ended with the following brief interpretation: »I am tempted to think that they represent some kind of primitive writing or otherwise record some abstract ideas connected with the dead.»

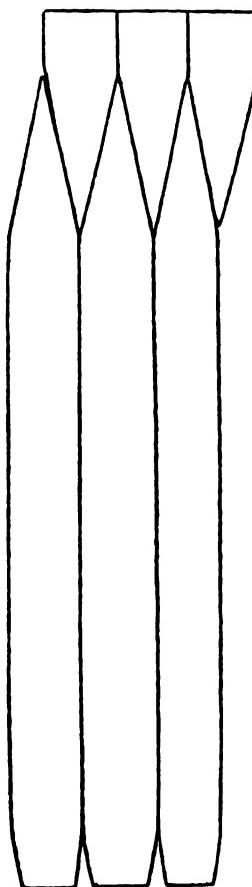


Fig. 45. Tentative reconstruction
of bone lancet group, K. 2142.

In »Researches into the Prehistory of the Chinese« (1943), page 255, I returned to these small bone objects in a chapter on numeral magic. I there wrote: »It seems quite likely that these indented bone plates . . . may belong to a system of numeral magic expressed in notches and dents of very minute size.«

Small rectangular bone plates of this kind occur at Chu Chia Chai in the following burials (for particulars see »detailed list of small finds«):

Skel. III	K. 2138: 3—28.
► VI.	K. 2135: 3. K. 2133: 83—184.
► XXII.	K. 2136: 72—117.
► XXXIII.	K. 2137: 37—54.
► XXXIV.	K. 2130: 14—20. K. 2134: 1—40. Burial place, site not stated.

These bone plates are rectangular with the exception of a few which are square or nearly so (K. 2133 b, K. 2133 a). K. 2133 c is broadly rectangular, but the bulk of the plates are 5—6 times longer than their breadth.

These plates have definitely a front side and a reverse side. The front side is smooth, in some cases with a certain amount of polish. It is also slightly convex with tapering ends.

The reverse side is square-cut and roughly striated (K. 2137: 37). In many specimens it is covered with a brownish-to-black substance which might be interpreted as the residue of some kind of paste that glued the plate to some substratum (textile?).

Many of the plates are in no way incised (K. 2133 d, K. 2134 a, K. 2137: 46). A large number however, are incised with one or several narrow and well-defined triangular indentations in the margin. Most of these have one single dent centrally placed in one margin (K. 2136 a, K. 2136: 74, 76).

On the broad plates K. 2133 the number of dents varies somewhat. The two uppermost of group K. 2133 a have one dent, the lowest in that group has in addition a dent close to the left corner. K. 2133 b and c each have 3 dents, one of them in the left corner.

K. 2138 a and b have dents at the corners only; K. 2138 a at one end only, K. 2138 b at both ends.

The two plates marked K. 2136 b both have 3 dents in the upper margin, the lower has one dent in the lower margin and the upper 2 dents in the lower margin.

A small number of plates are incised, not with dents in the margins but with diagonal incised lines, sometimes forming an incised diagonal cross (K. 2133 e and K. 2138 c).

The lower plate in the group K. 2134 b has two diagonal lines which do not meet but form a V-like figure. The upper plate in the said group has the same V-like figure, in the middle of which there is a marginal dent.

Most of these bone plates were found scattered in the soil near the heaps of human bones to which they belong. In two cases, however, Skel. XXII (K. 2136) and Skel. XXXIII (K. 2137), we were able to excavate and preserve *in situ* small groups of these plates in their original position.

Two of them have 7 plates lying together. K. 2137: 37 showing the striated reverse side with seven plates, each with one dent, all turned the same way. K. 2137: 46 had originally seven plates, but one is lost. These plates are unusually small, without any dent.

K. 2136: 76 are two plates, each with one dent turned the same way. K. 2136: 74 are two plates, each with one dent turned opposite ways. The same is the case with K. 2137: 40, with two dents in the lower plate.

K. 2137: 38 are two plates with the complicated pattern of a V-mark combined with one dent. These patterns are turned opposite ways.

These *in situ* groups have yielded some important information. In most cases there are not combined plates with different marks. All belonging to a group either have no dent, or one dent or else the V-mark with one dent.

These *in situ* groups (and others which are less complete) are too few to be conclusive. Nevertheless, they are sufficient to form an argument *against* the first of my suggestions of 1925 (Prel. Rep. p. 14) that the bone plates represent some kind of primitive writing, in which case we might expect to find the different types combined in varying ways.

My second alternative of 1925 was that the bone plates »record some abstract ideas connected with the dead». In »Prehistory» 1943, page 255 I have tentatively included these bone plates in a chapter on »cryptic magic». I there surmise that the bone plates »may belong to a system of numeral magic expressed in notches and dents of very minute size».

Further evidence is needed before this riddle is solved.

Among the dwelling-site material Pl. 16 there are five small bone objects Pl. 16, 15—19, two of which at least are to be counted among these bone plates.

Pl. 16,15 (K. 2054: 59) A trapezoidal bone plate with one smooth frontside and one striated reverse side, as is the case with the bone plates of the burial site, though this plate is thicker than those of the graves.

Pl. 16,16 (K. 2054: 57) A triangular bone plate, much worn all round.

Pl. 16,17 (K. 2054: 56) A very thick (5,5 mm.) bone piece, evidently an unfinished piece with quadrilateral cuts for breaking off into square pieces.

These three specimens (16,15—17) differ considerably from those of the graves. The two specimens Pl. 16, 18—19 (which we describe below) are more similar to the plates of the graves, though they are much larger than the latter.

Pl. 16,18 (K. 2054: 58) Rectangular bone plate. Length 24 mm. Width 7.5 mm. One side smooth and slightly convex. Ends with convex contour and tapering. Reverse side rough. Three dents.

Pl. 16,19 (K. 2054: 55) Big rectangular bone plate. Length 27 mm. Width 12 mm. Front side smooth, slightly convex. Ends square-cut but rounded off. Reverse side obliquely striated. Two big dents.

Cowrie imitations in bone.

(Plate 27)

In a lot (K. 2122) of marble beads bought from the villagers of Chu Chia Chai there is a genuine cowrie shell filled with soil of a local type. This may indicate that genuine cowries were to some extent available to the ancient settlers of Chu Chia Chai, though in fact we never found a genuine cowrie in our recorded excavations in the Chu Chia Chai burial site.

Imitations of cowries executed in bone were found in the following burials:

Skel. XXV. (K. 2129)

13 miniature bone cowries (Length 7—11,5 mm.)

Skel. XXXII. (K. 2148)

: 4,5. Small bone cowries, one strongly bent.

Length 12.5 mm. Width 6.5 mm.

Skel. XXXXIII. (K. 2146)

1 bone cowrie. Length 18 mm. Width 9 mm.

Skel. XXXXV. (K. 2128)

1 very long and slender bone cowrie. Length 21 mm. Width 8 mm. Thickness 5 mm.

Skel. XXXXV. (K. 2144) continued excavation.

1—4 big bone cowries.

: 1. Length 22 mm. Width 9.5 mm. This specimen is so far unique that it has not only the two conical holes at the two ends, but in addition a narrow, cylindrical, transverse hole.

: 2. Length 18 mm. Width 9.5 mm. Elegantly smooth.

: 3,4. Length 15 mm. Width 10—11 mm. Much corroded.

Skel. XXXXVI. (K. 2127).

2 bone cowries. Length 14 mm.

K. 2141.

: 1. Very big bone cowrie, flat, neatly polished all over. Length 28 mm. Width 11 mm. Thickness 4.5 mm.

This gives us, in all, 24 specimens distributed over six finds. These objects are very varied in size. One is long, slender and nearly cylindrical (K. 2128: 1), another is long, flat and broad (K. 2141: 1). A specimen such as K. 2129 is so small and shortened that the natural prototype has almost been lost sight of. Nearest to the natural cowrie comes K. 2144.

There is no doubt whatever that these bone carvings are imitations of cowries. Nevertheless it should be remarked that the mode of suspension was different from that of the true cowrie. In the genuine cowrie a broad suspension hole was formed by grinding down the highest part of the back of the shell. Here in the bone imitations a conical hole was bored in each end, which in fact suggestively recalls the characteristic sinuses at each end of the genuine cowrie shell.

CORRELATION OF CHU CHIA CHAI WITH OTHER SITES.

There is no doubt that Chu Chia Chai is a site of Late Yang Shao age. In »Pre-history» page 154—159 I have given a full analysis of the dwelling-site pottery from this locality, proving that there is on the one hand a small number of sherds of Ma Chia Yao (Middle Yang Shao) type, and on the other hand a small, well-defined group of Ma Chang type. But the main bulk of the Chu Chia Chai dwelling-site pottery is typical of the transitional Late Yang Shao period.

Much the same impression is conveyed by the ceramic material found in our careful excavation of the burial site in the southern part of Chu Chia Chai village. Here we collected three urns K. 5911, K. 5913 and K. 6148^x, closely conforming to the Middle Yang Shao funeral urns from the Pan Shan hills.

The majority of the urns from the Chu Chia Chai cemetery are typically Late Yang Shao.

^x) p. 1:1, | 4:4, | 2:4 |
5913 | 5911 | 6148 |

Pl. 3:2

One single mortuary urn (K. 2103) is typical of the deep red Ma Chang group. An element of the Chu Chia Chai ceramics which was not clearly recognized when I wrote »Prehistory» is referred to here (pages 46—47, 35). In the Chu Chia Chai dwelling-site deposit (Pl. 9,2—4) and also with Skel. XII of the burial site (Pl. 5,6) there were found fragments of urns which seem to have been closely similar to some burial urns from the Chia Yao and Hsia Hsi Ho sites. I am at a loss to explain this affinity to an urn type which falls within an advanced stage of the Bronze Age.

Pl. 11:8, 12:7

Finally, it should be recalled that we have described above (p. 47) two sherds (K. 2120: 287 and K. 2055: 231), which are typically of Chi Chia age. My comment on these two specimens may be repeated here: »I have no doubt that these two specimens are actually of Chi Chia age, which means that they were already old when the Chu Chia Chai people settled here, antique objects once left on the spot by some Chi Chia emigrants.»

Apart from the strange affinities which the Chu Chia Chai ceramics show to potteries of other Kansu stages, we would now call attention to a couple of remarkable contacts with the Lo Han T'ang site (Early Yang Shao).

One refers to the furrowed bone knives with flint flakes.

The specimen K. 2139: 1 (Pl. 25,1) from the burial site of Chu Chia Chai gave in its completeness the clue to the understanding of these strange instruments. Several fragments, K. 2054: 38, 43—46 (reproduced in Pl. 15 and 16) were found in the Chu Chia Chai dwelling site.

Two fine specimens from Lo Han T'ang were described in »Prehistory», page 86 (Pl. 41, 1—2).

Another beautiful specimen of a peculiar type was excavated in the »Pillar» near the N. shore of Kokonor.

Another group of finds which should be considered in this connection are the winged stone knives.

Three fragments of winged stone knives from Chu Chia Chai dwelling site are here described on page 52 (Pl. 21, 1—2, Pl. 23,1). The likeness to those from Lo Han T'ang is striking as it also includes in one case the dentation of the sides. Unfortunately the Chu Chia Chai specimens are only small fragments, but it looks as if they represent a more advanced type with bolder wings.

Some of my readers may consider these two contacts between Lo Han T'ang and Chu Chia Chai as evidence of a common age of the two sites. I have based my chronology on the painted pottery and feel that this kind of evidence is more conclusive.

One fact should be noticed: both these highly characteristic types, the bone knives with flint flakes and the winged stone knives, are limited to the Sino-Tibetan borderland. They were never seen in central Kansu or in Honan. They may have a racial background.



1



2



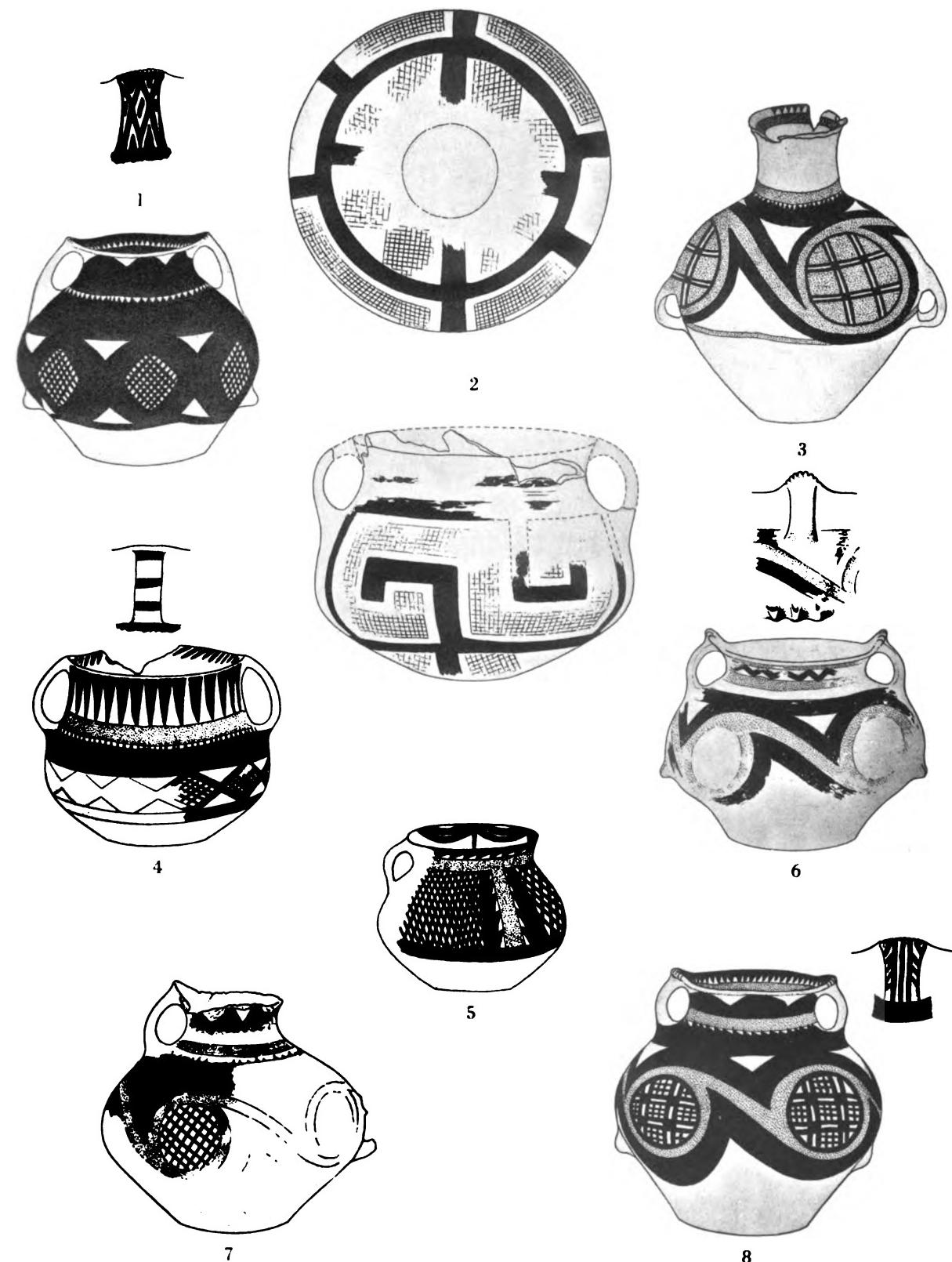
3



4

$\frac{1}{3}$ of nat. size



2 half of nat. size. All the rest $\frac{1}{2}$ of nat. size



$\frac{1}{4}$ of nat. size



1



2



3



4



5



6

Half of nat. size



1



2



3

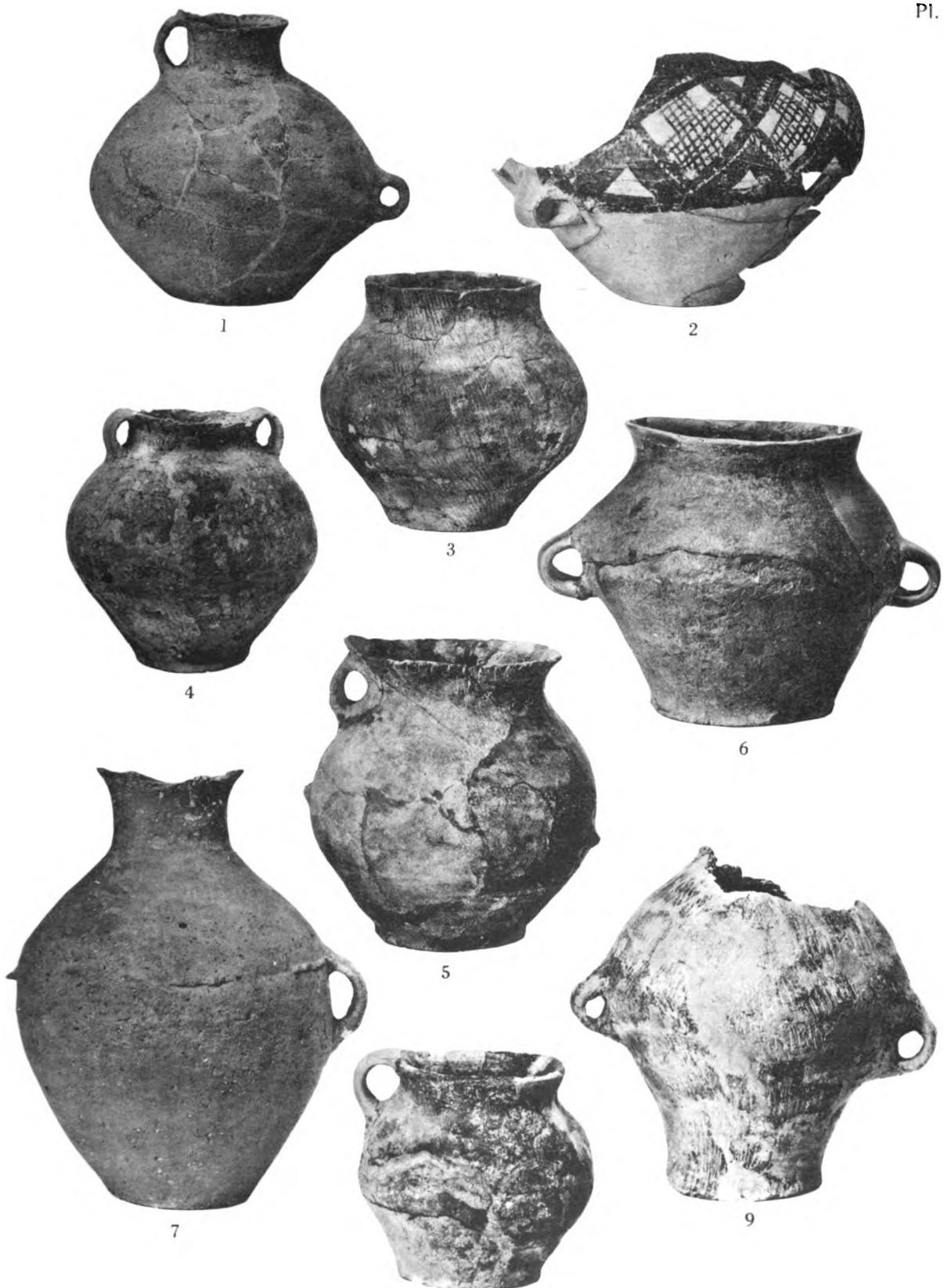


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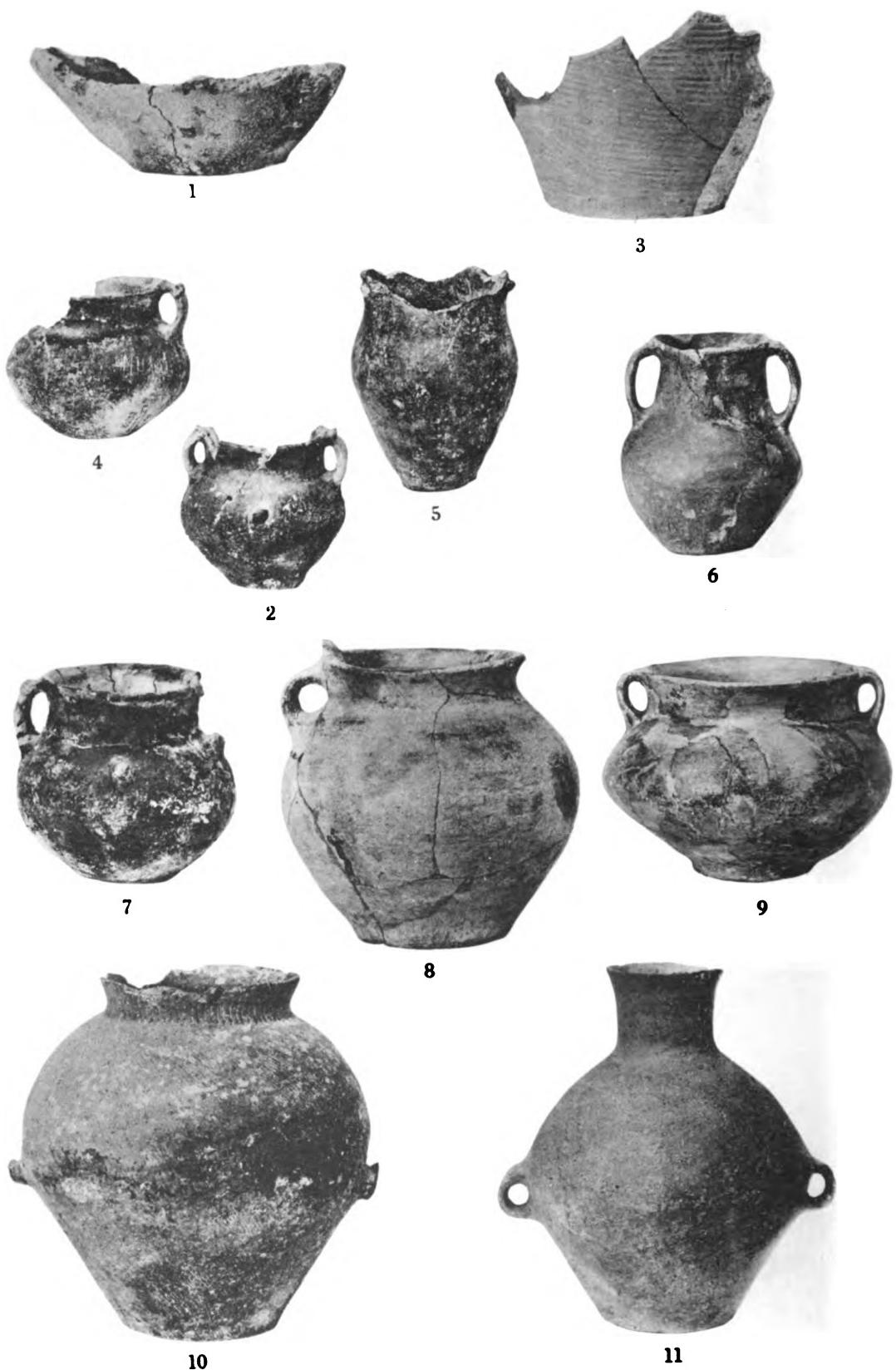
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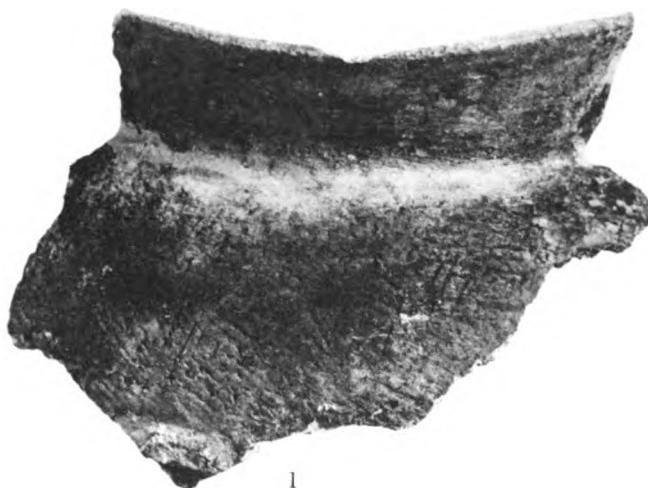


1/4 of nat. size

Pl. 8.



$\frac{1}{4}$ of nat. size



1



2



3



4



5



6



7



8



9

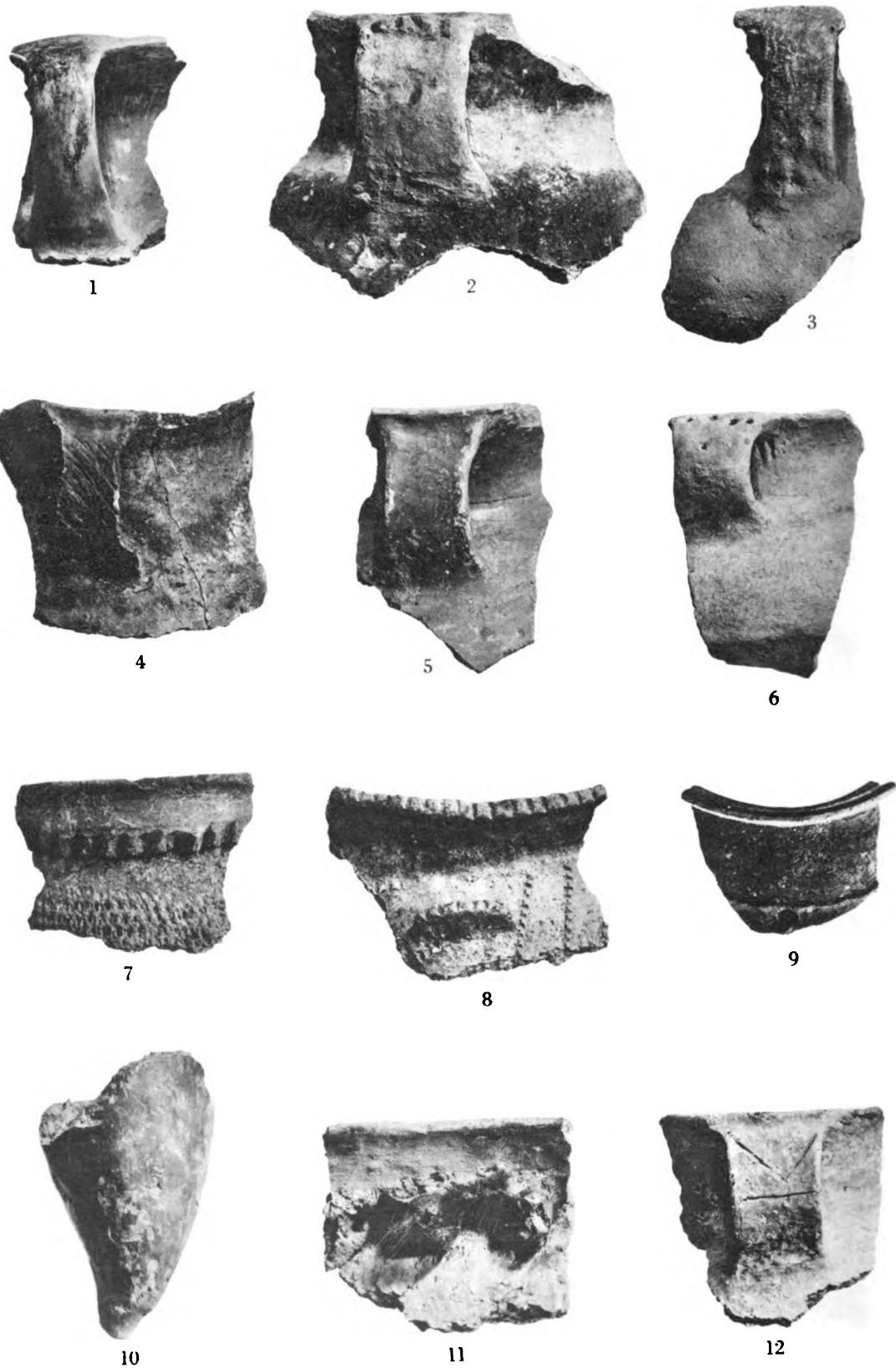


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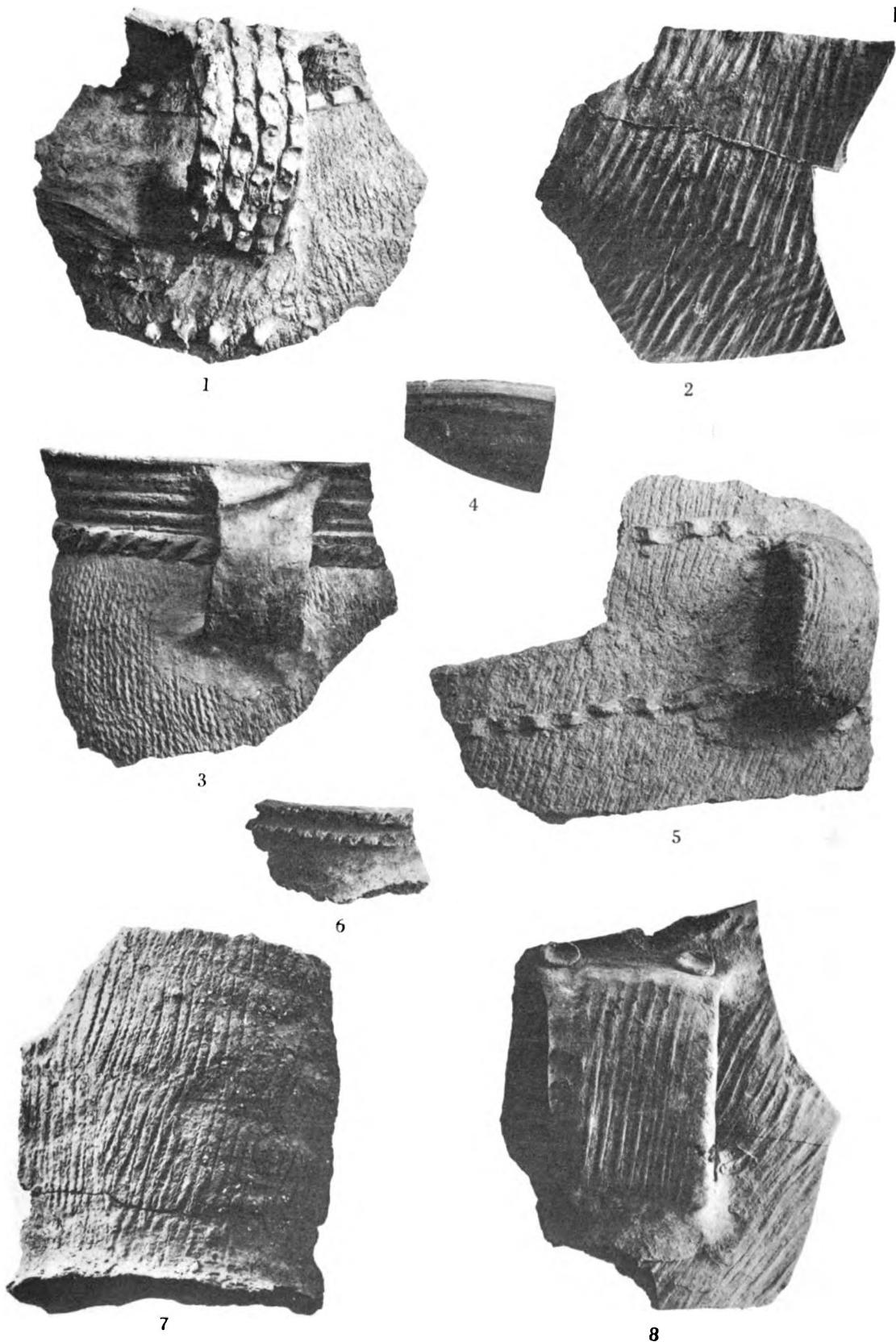


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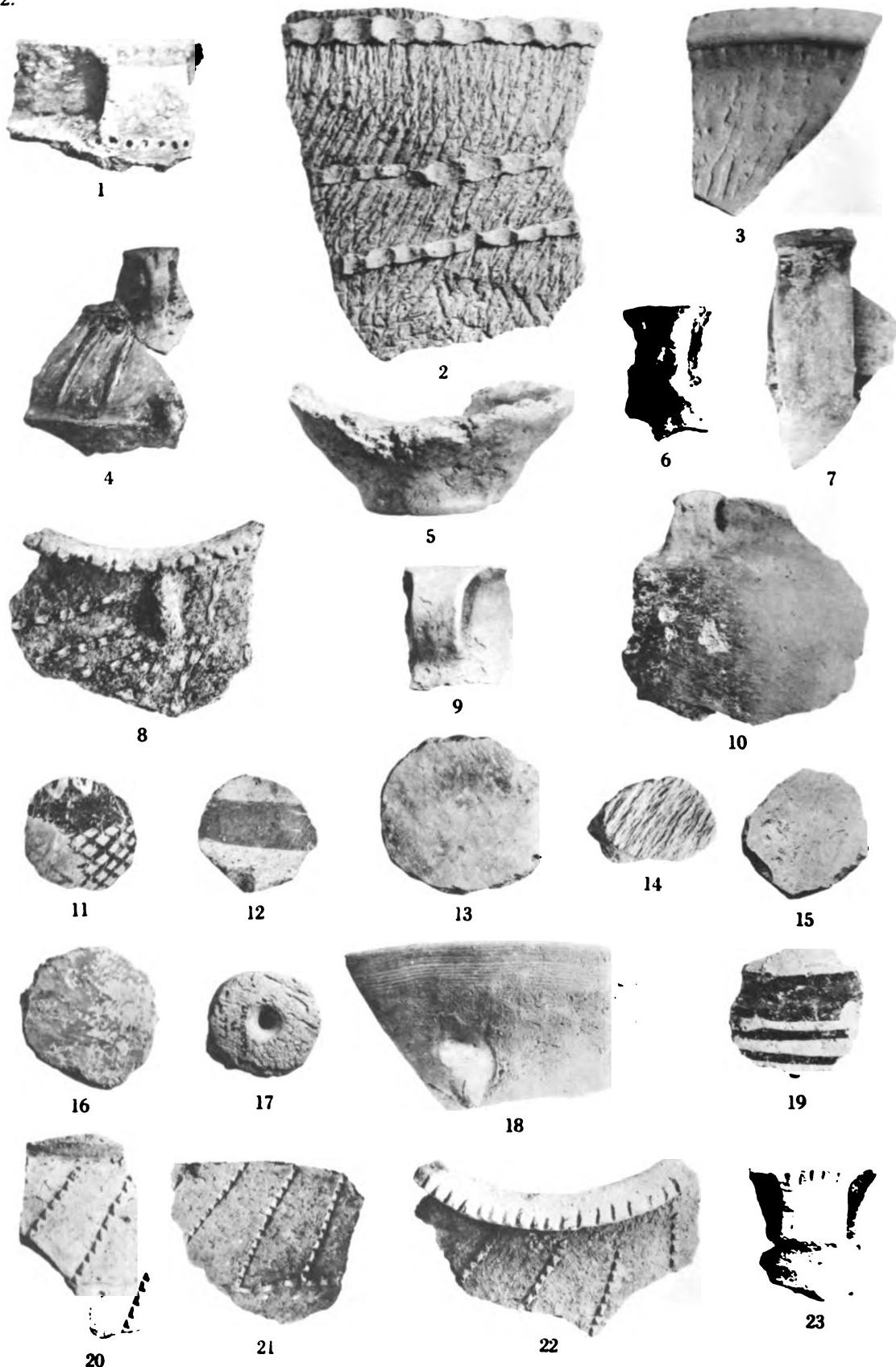
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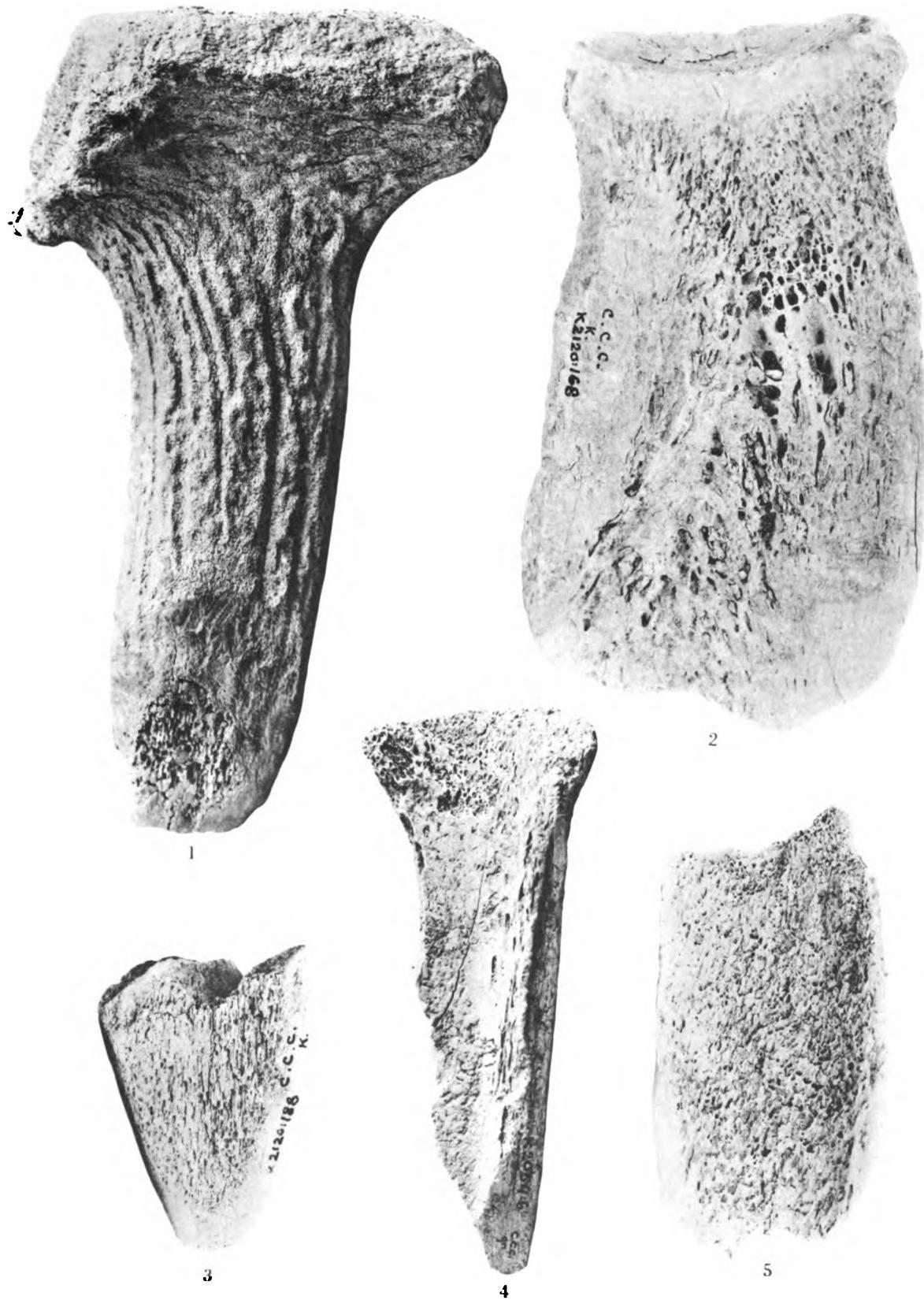
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Nat. size



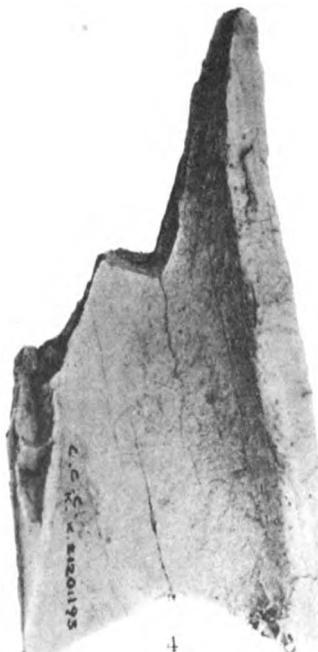
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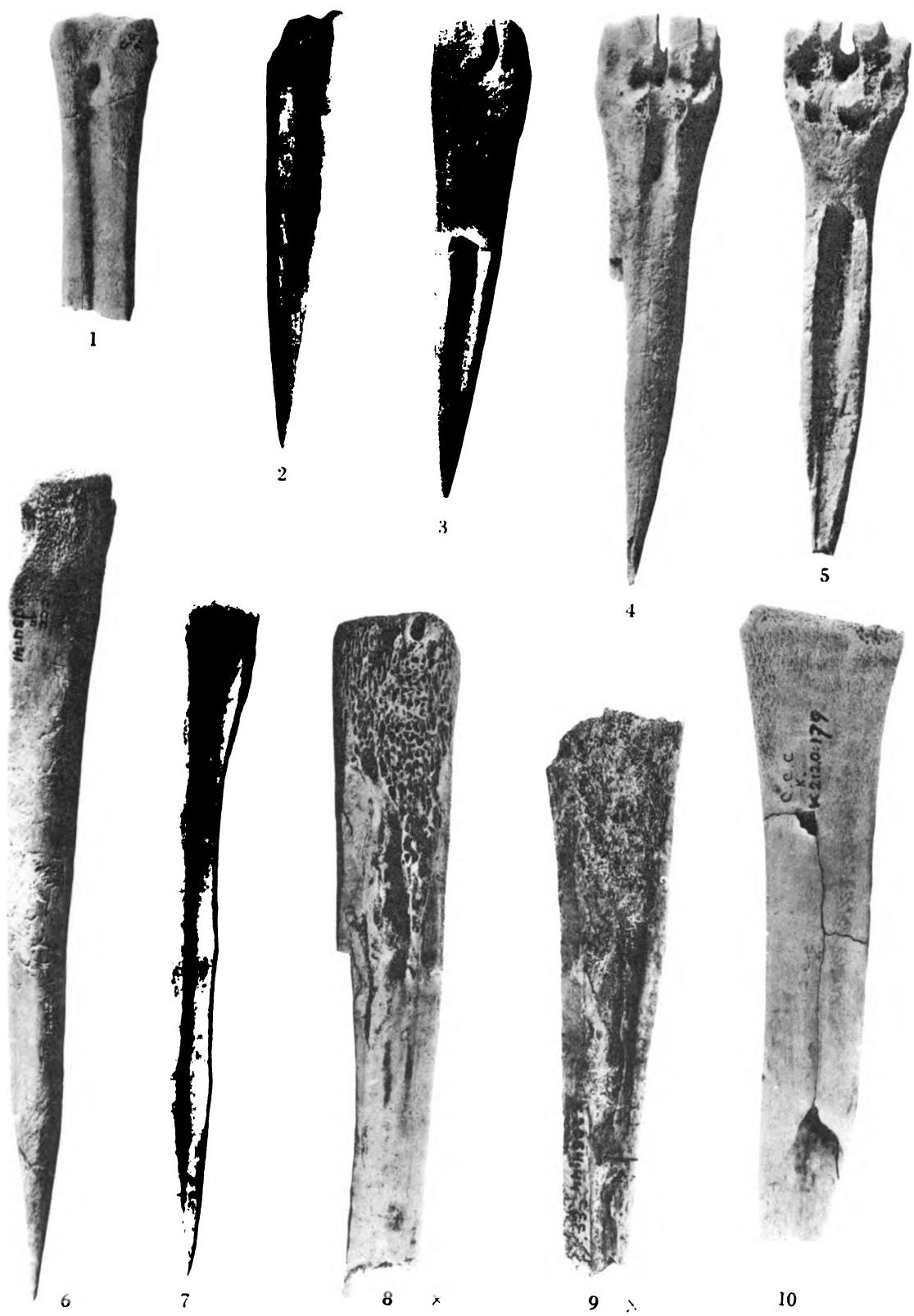


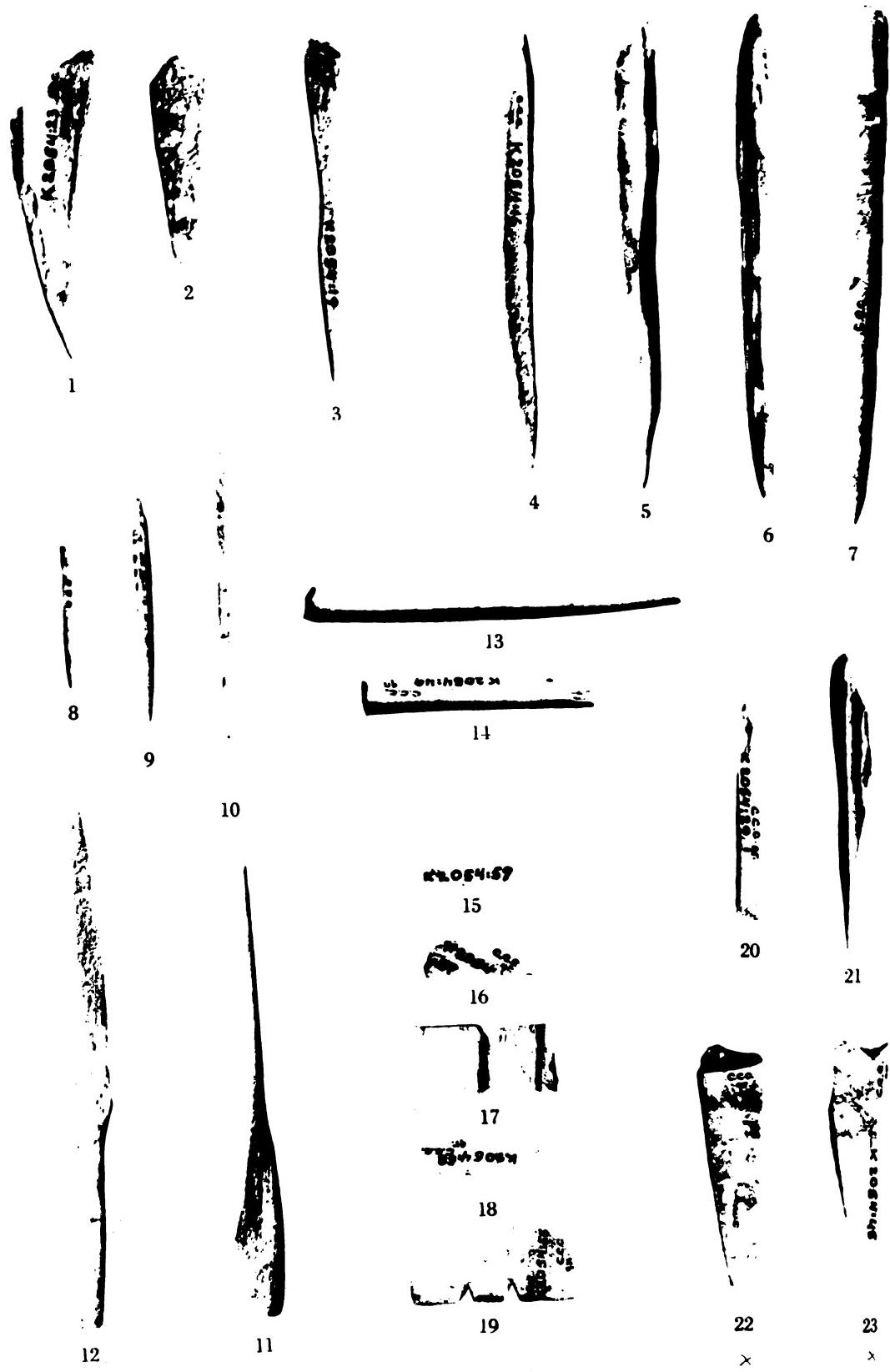
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6

Nat. size







1



2



3

Nat. size

↓





1



2



3



4



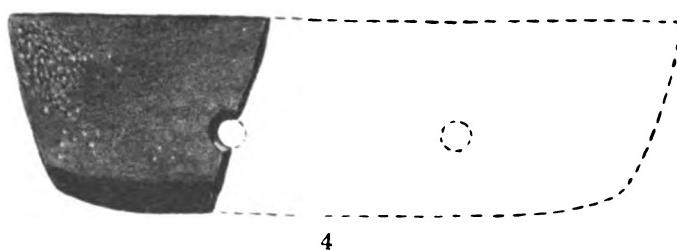
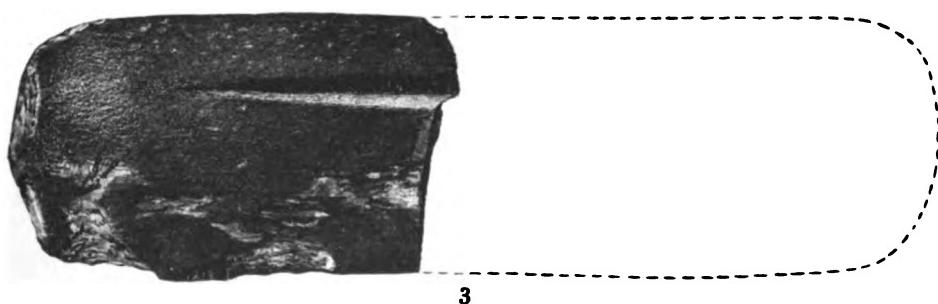
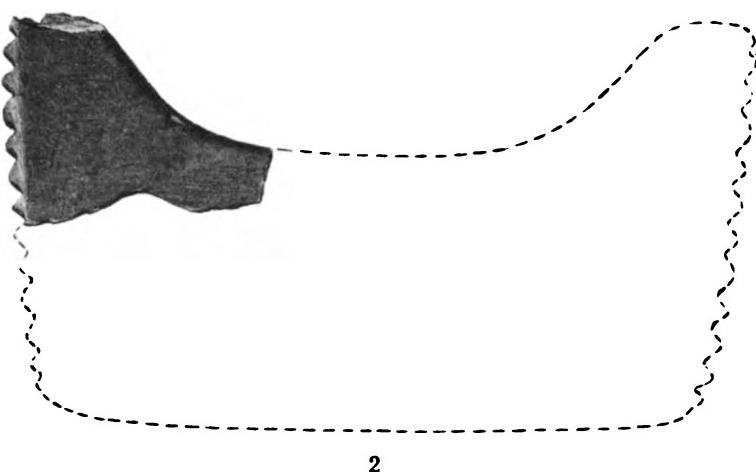
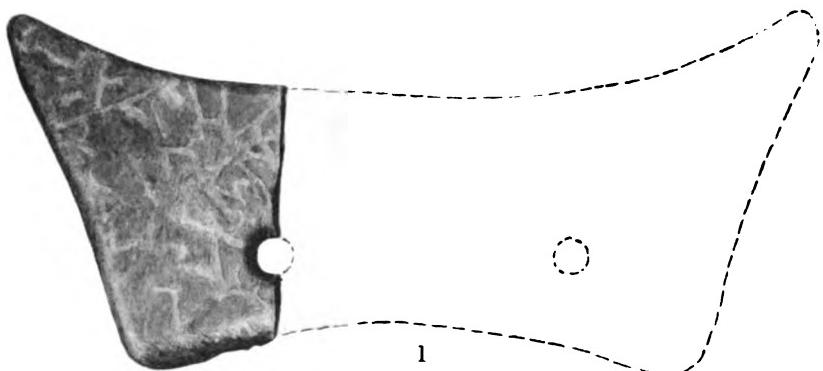
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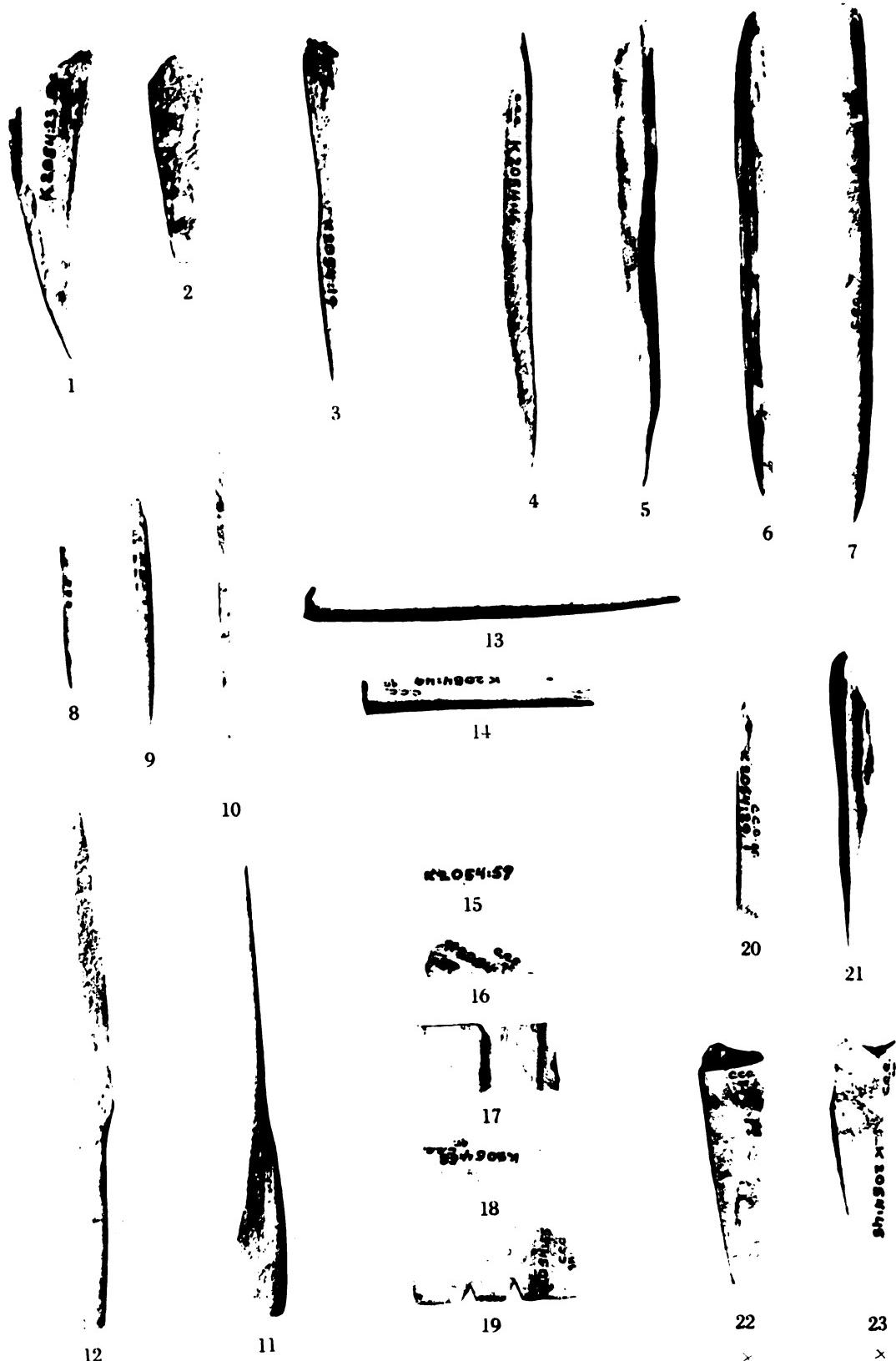
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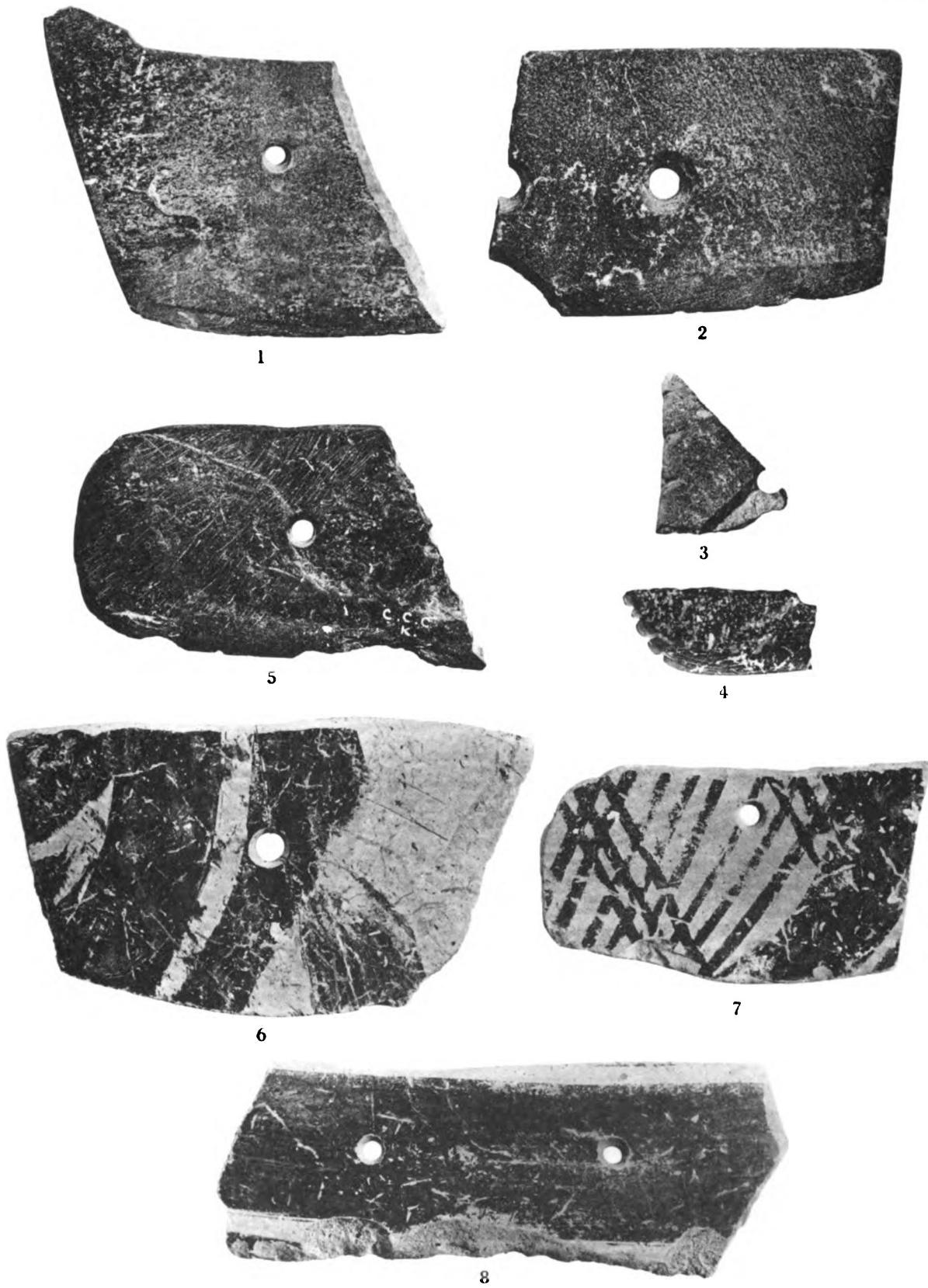




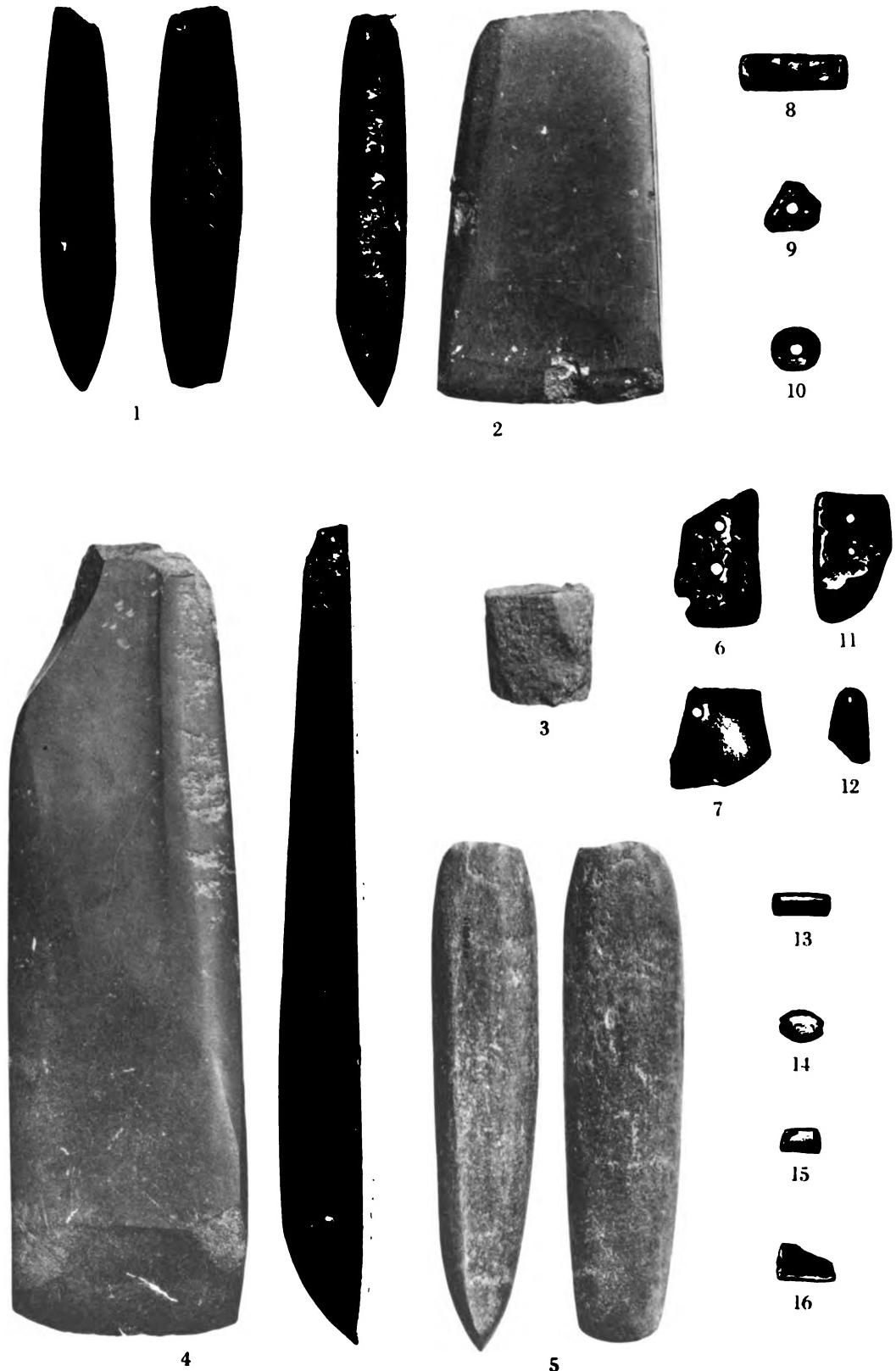
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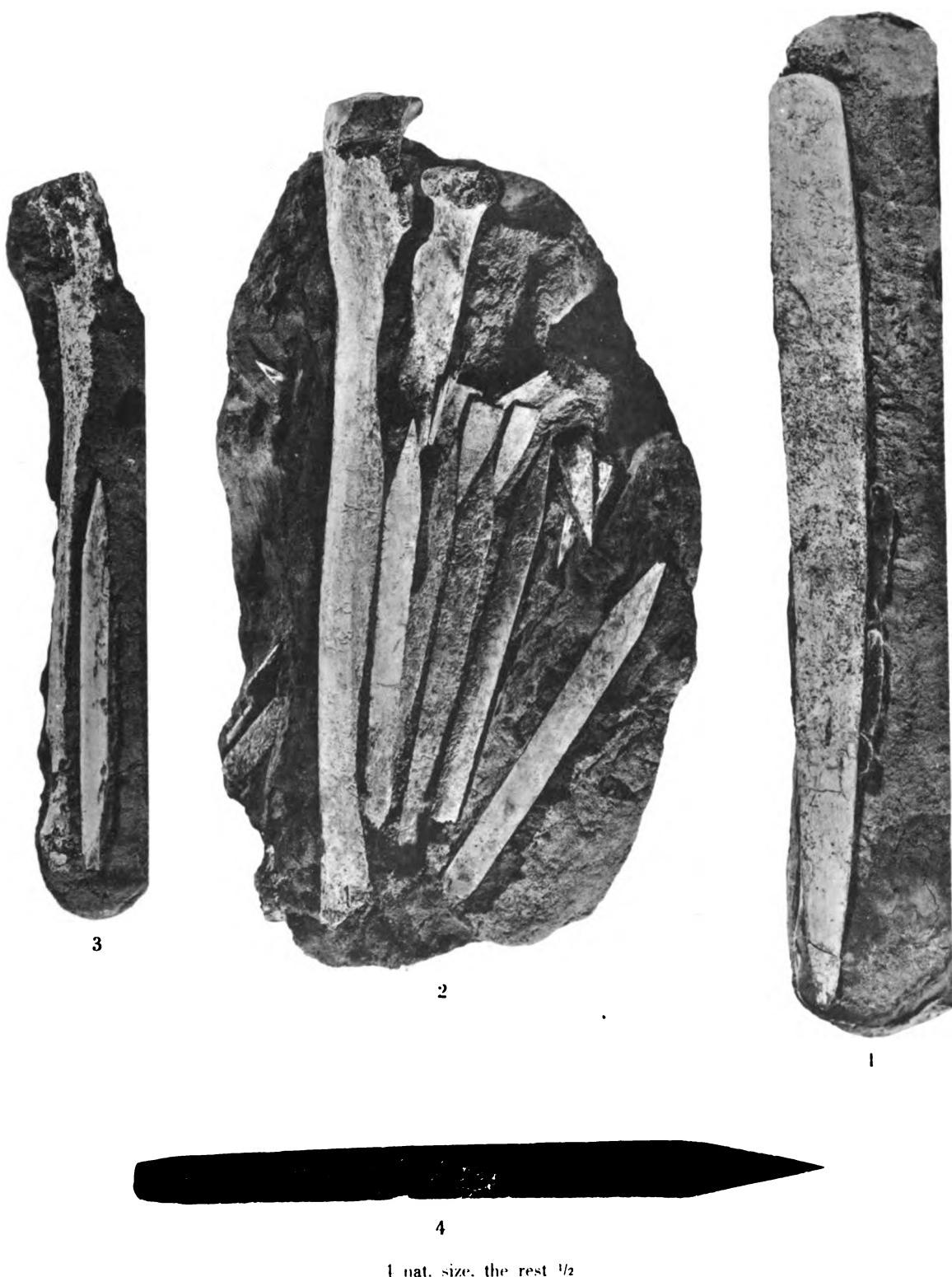
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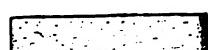
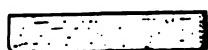


Nat. size



1 nat. size, the rest $\frac{1}{2}$

Pl. 26.



K 2133 d



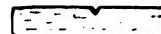
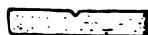
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K 2133 c



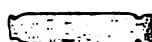
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K 2136 a



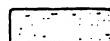
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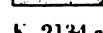
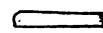
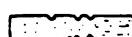
K 2138 b



K 2138 c



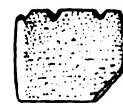
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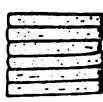
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K 2136 b



K 2133 b



K 2137:46



K 2136:74



K 2136:76



K 2137:37

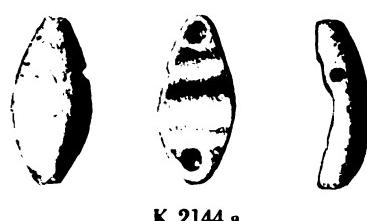
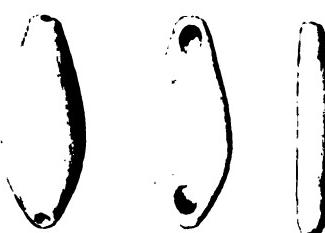
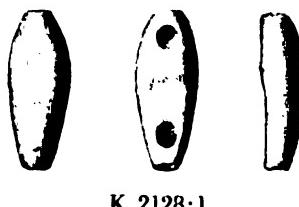
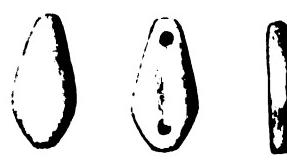
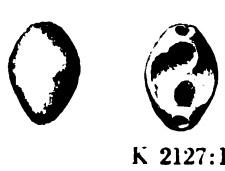
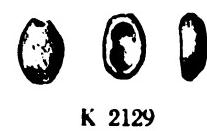
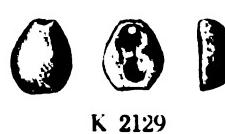
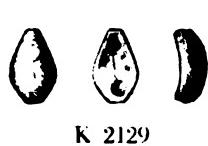


K 2137:38



K 2137:40

Nat. size



Nat. size



A.

The Chu Chia Chai site
seen from the slope of the 210 m. hill, facing E.



B.

Excavation in the Chu Chia Chai burial site



A. S.AXXXII
(Chin)

S.AXXXIII
(Chen)

S.AXXXIV
(Li)



B.

Excavation of the Chu Chia Chai burial site

THE BOOK OF ODES

TA YA AND SUNG

BY

BERNHARD KARLGREN

This is a sequel to my work *The Book of Odes, Kuo feng and Siao ya*, BMFEA 16, 1944. The glosses on the Ta ya and Sung sections will be published in Bulletin 18.

Ode CCXXXV: Wen wang.

1. Wen wang is on high, oh, he shines in heaven; though Chou is an old state, its (heavenly) appointment is new; the house of Chou became amply illustrious, was not the appointment of God timely? Wen wang ascends and descends (a), he is on the left and right of God. — 2. Vigorous was Wen wang, his good fame never ceases; amply endowed, indeed, was (the house of) Chou; there were the grandsons and sons of Wen wang; the grandsons and sons of Wen wang, (they are) the trunk and the branches (of the family) for a hundred generations! All the officers of Chou, they are amply illustrious for (ample =) many generations. — 3. Amply illustrious for generations, their plans (have been carefully laid:) are very orderly; fine are the many officers who are born in this kingdom; the kingdom has been able to bear them, they are the supporters of Chou; stately are the many officers; Wen wang through them enjoys his repose. — 4. August was Wen wang, continuously bright and reverent; great, indeed, was the appointment of Heaven; there were Shang's grandsons and sons; Shang's grandsons and sons, their number, was it not a hundred thousand! But God on High gave his appointment, and so they became subject to Chou. — 5. They became subject to Chou; Heaven's appointment is not for ever; the officers of Yin were fine and active, but their libations were presented in the capital (of Chou); when they made their presentation of libations, they wore as (regular =) ritual garments, the embroidered skirts and ceremonial caps; oh, you promoted servants of the king, should you not think of your ancestors? — 6. Should you not think of your ancestors, and so cultivate their virtues? For ever (be a match for =) be worthy of (Heaven's) appointment, and seek for yourself much felicity; when Yin had not yet lost the multitudes, it was able to be a counterpart to God on High (b); you ought to mirror yourself in (the fate of) Yin; the great appointment is not easy (to keep). — 7. The appointment not being easy (to keep), may it not cease in your persons (c); display and make bright your good fame; the lords of Yü (d) and (the house of) Yin got their

investiture from Heaven; but the actions of High Heaven have no sound, no smell (e); you should (now) make Wen wang your pattern; all the states will then have confidence.

(a) *Descending* when coming, as a spirit, to accept sacrificial gifts. (b) Rulers on earth, corresponding to God in heaven. (c) But continue in your descendants. (d) The dynasty prior to the Hia. (e) They are inscrutable, Heaven has rejected Yin.

Ode CCXXXVI: Ta ming.

1. Shedding brightness below, majestic on high, Heaven is difficult to rely on (a); it is not easy to be king; the lawful heir of the Yin on the throne of Heaven was (caused not to =) not permitted to (encompass =) embrace the (states of the) four quarters. — 2. The lady Chung Jen of Chi came from the Yin-Shang, she came and married in Chou; she became bride in the capital; and so together with (her husband) Wang Ki she practised the virtue; T'ai Jen (b) became pregnant and bore this Wen wang. — 3. Now this Wen wang, he was careful and reverent; brightly he served God on High, and so he could aspire to much happiness; his virtue did not deflect, and so he received the states of the (four) quarters. — 4. Heaven looked down upon the world below, and its appointment lighted on (him); when Wen wang started his (initiative =) action, Heaven made for him a mate, to the north of the Hia (river), on the banks of the Wei (river) (c); Wen wang was fine; and in a great state there was the young lady. — 5. In a great state there was the young lady, she looked as if she were a younger sister of Heaven; Wen fixed on a lucky day, and went in person to meet her on the Wei (river); he arranged boats to form a bridge; amply illustrious was the splendour. — 6. The appointment came from Heaven; it gave the appointment to this Wen wang, in Chou, in the capital; the lady-successor was (a girl from) Shen; the eldest daughter (of Shen) (acted =) performed her functions, and she staunchly bore Wu wang; (Heaven said:) »I shall protect and help you and appoint you, to march and attack the great Shang». — 7. The cohorts of Yin-Shang were massed like a forest; a solemn declaration was made at Mu ye: »It is we who are rising! God on High (approaches =) looks down upon you; do not (make double your hearts =) be unfaithful in your hearts». — 8. The field of Mu ye was very wide; the t' a n -wood carriages were brilliant; the four-teams of bay and white-bellied horses went *pwáng-pwáng*; the grand-master (d) was Shang-fu, he was an eagle, a hawk; bright was that Wu wang; he killed and smote the great (people of) Shang; the morning of the encounter was clear and bright.

(a) Its charge is easily lost. (b) I. e. Chung Jen. (c) Or, with another school: *to the south of (the city of) Ho*. (d) I. e. the general.

Ode CCXXXVII: Mien.

1. Long drawn-out (a) are the stems of the gourds; when (our) people first was born, it came from Tu, from Ts'i and Ts'ü; the ancient prince Tan-fu, he moulded covers, he moulded caves (b); as yet they had no houses. — 2. The ancient prince Tan-fu, at day-break he galloped his horses; he followed the bank of the Western

river, he came to the foot of (mount) K'i; and so together with the lady Kiang he came and lingered (there) and took up an abode. — 3. The plain of Chou was rich and ample; even the k i n and t ' u plants (c) were sweet like honey-cakes; and so he started, he planned, he notched our tortoises (d); and so he stopped; he halted, he built houses here. — 4. And so he remained quiet, he stopped; he went to the left, he went to the right, he made boundaries, he made divisions, he (scubited =) measured to the cubit, he laid out acres; from west he went east, everywhere he took the task in hand. — 5. And so he called the Master of Works, he called the Master of the Multitudes (e), he made them build houses; their plumb-lines were straight; they lashed the boards and thus erected the building frames; they made the temple in careful order. — 6. In long rows they collected it (sc. the earth for the buildings), in great crowds they measured it out, they pounded it, (the walls) rising high; they scraped and (repeated =) went over them again, (so they became) solid; an hundred t u -measures of walls all rose; the (rhythm-giving) drums could not keep pace (f). — 7. And so he raised the outer gate; the outer gate was high; he raised the principal gate; the principal gate was grand; he raised the grand Earth-altar, from which the great (troups:) armies marched. — 8. Unquenchable was their wrath, unfailing was their fame; the oaks were (pulled out =) thinned, the roads were cleared; the K'un-yi barbarians (withdrew:) fled, oh how they panted. — 9. (The states of) Yü and Juei gave pledges of good faith in concluding the peace, Wen wang placed their victim animals on the sacrificial tables; we thus had adherents in distant parts, we had such who (were before and behind =) attended us on all sides, we had such who hastened forward (to us), we had such who defended (us) against insult.

(a) For m i e n - m i e n cf. ode 171. (b) For his people to live in. (c) Bitter herbe. (d) For divination. (e) Farmers. (f) The people worked so eagerly.

Ode CCXXXVIII: Yü pu.

1. Luxuriant are the oak clumps, we make firewood of them, we heap them; stately is our ruler and king; to the left and the right they hasten to him. — 2. Stately is our ruler and king; to the left and the right (of him) they hold insignia; they hold the insignia high, as befits the fine officers. — 3. Floating along are those boats on the King (river), many men are rowing them; the king of Chou marches, and the six armies go along with him. — 4. Great is the Heavenly Han river (a), it forms a pattern on heaven; may the king of Chou have a high old age, is he not a man indeed! — 5. (As if) carved and chiselled is his (décor =) exterior, (like) gold and jade is his (look =) appearance; vigorous is our king, he makes laws and rules for (the states of) the four quarters.

(a) Properly: »the Cloud Han« = the Milky Way.

Ode CCXXXIX: Han lu.

1. Look at that foot of the Han hill, the hazels and h u trees are numerous; joyous and pleased is the lord, in his striving for blessings he is joyous and pleased.

— 2. Bright is that libation-ladle of jade, the yellow liquid is within; joyous and pleased is the lord, on whom felicity and blessings descend. — 3. The hawk flies and reaches heaven; the fish leaps in the deep; joyous and pleased is the lord, is he not a man indeed! — 4. The clear wine is filled in, the red male (victim) is ready; with them he makes offering and sacrifice, and increases his great felicity. — 5. (Bright =) fresh-looking are those oaks, they are fired in sacrifice by the people; joyous and pleased is the lord, he is (encouraged =) rewarded by the spirits. — 6. Luxuriant are those k'o creepers and lei creepers, they (reach =) spread out over branches and boughs (a); joyous and pleased is the lord, in seeking felicity he does not swerve (b).

(a) A frequent simile for the lord's having clients who cling to him, see ode IV. (b) From the straight course.

Ode CCXL: *Si chai*.

1. Reverent was T'ai Jen, the mother of Wen wang; beloved was lady Kiang of Chou (a), the wife in the (royal) house in the capital; T'ai si (b) carried on their fine fame; and so a hundred were those young men (her descendants). — 2. He (sc. Wen wang) was obedient to the (dead) princes of the clan (his ancestors); of the Spirits, none were annoyed with him; of the Spirits, none were (pained, grieved =) dissatisfied with him; he was a model to his consort, it extended to his brothers, and so he governed his family and state. — 3. Concordant he was in the palace, reverent he was in the ancestral temple; amply illustrious, he looked down with care (c); never weary, he gave protection. — 4. His great (activity:) energy was unquenchable, his brilliance and greatness had no flaw; even (what he did not hear =) what was not told him directly, he made use of; even what was not told him in remonstration, he accepted (d). — 5. As a grown-up man he had virtue; (already) as a young boy he was trained and perfected; the men of old were untiring; renowned and fine was that nobleman!

(a) Wen wang's grandmother. (b) Wen wang's wife. (c) Upon his people. (d) He was so eager to pick up good ideas from others.

Ode CCXLI: *Huang yi*.

1. August is God on High; looking down, he is majestic; he inspected and regarded the (states of) the four quarters, he sought tranquillity for the people; these two kingdoms (sc. of Hia and Yin), their government had failed; throughout those states of the four (quarters) he investigated and (measured =) estimated; God on High brought it to a settlement; hating their (using amleness =) extravagance, he looked about and turned his gaze to the West; and here he gave an abode (a). — 2. They cleared them away, they removed them, the standing dead trees, the (fallen) dead trees; they dressed them, levelled them, the bushy clumps, the li trees; they opened them up, they cleared them, the tamarisks, the k'ü trees; they cleared them away, they cut them, the wild mulberry trees, the chê trees;

God transferred the bright virtue (sc. from Yin to Chou), their customs and institutions then became grand; Heaven established for itself a counterpart (on earth), the given appointment became (solid:) sure. — 3. God examined the mountains: the oaks were thinned, the pines and cypresses were cleared; God made a state, made a counterpart of himself (b); it began with T'ai-po and Wang Ki; now this Wang Ki, in his loving heart he was friendly; he was friendly to his brothers, he affirmed his happiness; and so there was given him (brightness =) glory, he received blessings that he never lost, (coveringly =) extensively he possessed the (states of the) four quarters. — 4. Now this Wen wang (c), God (measured =) probed his heart: settled was his reputation, in his virtue he was able to be enlightened; he was able to be enlightened, to be good; he was able to preside, to be ruler, to be king over this great kingdom; he was able to be accommodating, to be concordant (with the subjects); and when they were concordant with Wen wang, his virtue had nothing that caused regret (d); he received God's blessings; it (extended:) reached to his grandsons and sons. — 5. God said to Wen wang: »Do not like that be relaxed, do not like that indulge your desires; and so he (the king) first ascended a high bank (sc. to look out): the people of Mi were not (respectful =) obedient, they dared to oppose the great kingdom; they invaded Yüan and marched against Kung; the king was majestically angry at this; and so he marshalled his cohorts; in order to stop them he marched to Kü, to affirm the prosperity of Chou, to respond to (the wishes of) the whole world. — 6. Firmly settled he was in his capital; they invaded from the borders of Yüan and ascended our high ridges; but they (did not =) could not marshal their forces on our hills, on our hills, our slopes; they (did not =) could not drink at our springs, at our springs, our pools; he (the king) dwelt in the freshly bright plain, he lived to the south of (mount) K'i, on the course of the Wei; to the myriad states he was a pattern, the king of the subject peoples. — 7. God said to Wen wang: »I think cherishingly of your bright virtue; in spite of your great renown it is not shown off, in spite of your prominent greatness it is not changed; without (need of) knowledge or wisdom (e) you obey the laws of God»; God said to Wen wang: »Plan with your partner states, unite with your brothers; with your hooks and (climbers =) ladders, and your approachers and knockers (f) attack the walls of Ch'ung». — 8. The approachers and knockers were (ample =) huge, the walls of Ch'ung were (hill-top-like =) high; the captured prisoners for the question came (*seriatim* =) in a slow procession; the cut heads (were brought) solemnly; he offered them in sacrifice to God on High, he offered them in the camping place (g), he brought them forward, he adjoined them (to the other offering gifts); in the four quarters there were none who affronted him; the approachers and knockers were large, the walls of Ch'ung were powerful; he smote them (the enemies), he killed them, he exterminated them, he annihilated them; hence in the four quarters there were none who opposed him.

(a) To the Chou. (b) A king. (c) His son and successor. (d) All parties were satisfied. (e) But by nature, without effort. (f) Engines of assault. (g) To placate the Spirits of the soil invaded.

Ode CCXLII: Ling t'ai.

1. He planned and commenced the Divine Tower, he planned it and built it; the people worked at it, in less than a day they achieved it; he planned and commenced it, without urging them on; but the people diligently came (to work). — 2. The king was in the Divine Park, where the does and stags lay (resting); the does and stags were glossy, the white birds were glistening; the king was by the Divine Pool; oh, the plentiful fishes leapt. — 3. (There were) vertical posts and horizontal boards (forming the bell frames), there were dented ornaments, there were big drums, there were big bells; oh, assorted were the drums and bells, oh, pleasant was the (Hall of the) Circular Moat (a). — 4. Oh, assorted were the drums and bells, oh, pleasant was the (Hall of the) Circular Moat; the alligator-skin drums (sounded) *b'ung-b'ung*; the blind (musicians) executed their (work =) performance.

(a) The archery school hall.

Ode CCXLIII: Hia wu.

1. (Descending »footsteppers« =) successors in a line are the Chou; from generation to generation there have been wise kings; three rulers are in heaven, the king is their counterpart in the capital. — 2. The king is their counterpart in the capital; the hereditary virtue he actively seeks; forever he is (a match for =) worthy of (Heaven's) appointment, he has achieved the trustworthiness of a king. — 3. He has achieved the trustworthiness of a king; (he is) a pattern to the earth below; forever he is filial and thoughtful; filial and thoughtful he is a norm (to others). — 4. Lovable is this (One man =) sovereign, responsive (a) is his compliant virtue; forever he is filial and thoughtful (of the ancestors), brightly he continues their task. — 5. Brightly he comes and is permitted to continue in the footsteps of his ancestors; oh, a myriad are his years (b), he receives Heaven's blessings. — 6. He receives Heaven's blessings, the (people of) the four quarters come to felicitate him; oh, a myriad are his years, there will surely be helpers (for him).

(a) To the love and expectations of the people. (b) I. e. his and his descendants.

Ode CCXLIV: Wen wang yu sheng.

1. Wen wang has fame; he made great his fame (a), he sought their (sc. the people's) tranquillity; he saw his work achieved; Wen wang was splendid. — 2. Wen wang received the appointment, he had these martial achievements; when he had made the attack on Ch'ung, he made a city in Feng; Wen wang was splendid. — 3. The wall he built was moated, the (city) Feng he built matched it; he did not alter his plans (b), (going backwards =) mindful of his predecessors, he came and was filial; the royal ruler was splendid. — 4. The king's work was (bright =) splendid; the walls of Feng were where (the peoples of) the four quarters came together; the royal ruler was their support; the royal ruler was splendid. — 5. The river of Feng flowed to the east, is was the vestige of Yü (c); that was

where (the people of) the the four quarters came together; the august king was a (true) ruler; the august king was splendid. — 6. The capital of Hao (had) the (Hall of the) Circular Moat; from west, from east, from south, from north, there were none who thought of not submitting; the august king was splendid. — 7. The one who examined the oracle was the king; he took his residence in the Hao capital; the tortoise (d) directed it, Wu wang (e) completed it; Wu wang was splendid. — 8. In the Feng river there are k 'i plants; did Wu wang not work? He handed down his plans to his (grandsons =) descendants, in order to tranquillize and assist his son; Wu wang was splendid.

(a) We could translate: «Great was his fame, but the par. lines that follow show that tsün is here a transitive verb. (b) Which followed up the plans of his predecessors. (c) The legendary ruler who regulated all the great rivers. (d) Tortoise-shell oracle. (e) The son and successor of Wen wang.

Ode CCXLV: Sheng min.

1. The one who first bore our (people =) tribe was (lady) Yüan of Kiang; how did she bear the (people =) tribe? She (was able =) understood well to bring yin and si sacrifices, (in order to eliminate her having no child =) that she might no longer be childless; she trod on the big toe of God's footprint, she became elated, she was (increased =) enriched, she was blessed; and so she (was moved =) became pregnant, and (it was soon =) it came about quickly (a); she bore, she bred: that was Hou Tsi («Prince Millet»). — 2. She fulfilled her months, and the first-born then came forth; there was no bursting, no rending, no injury, no harm, thus manifesting the divine nature of it (b); did God on High not give her ease, did he not enjoy (her) sacrifices! (Quietly:) tranquilly she bore her son. — 3. They laid him in a narrow lane, the oxen and sheep (at their legs =) between their legs nurtured him; they laid him in a forest of the plain, he (met with =) was found by those who cut the forest of the plain; they laid him on cold ice, birds covered and protected him; then the birds went away, and Hou Tsi wailed; it carried far, it was (great =) strong, his voice then became (great =) loud. — 4. And then he crawled, (then) he was able to (straddle =) stride, to stand firmly; and so he sought food for his mouth; he planted it (sc. the soil) with large beans; the large beans were (streamer-like =) rankly-waving; the (culture of grain =) grain cultivated had plenty of ears, the hemp and wheat was (covering =) thick, the gourd stems bore ample fruit. — 5. Hou Tsi's husbandry had the method of helping (the growth); he cleared away the rank grass; he sowed it (sc. the ground) with the yellow riches; it was (regular =) of even growth and luxuriant; it was sown, it became tall, it grew, it flowered and set ears, it became firm and fine; it had ripe ears, it had solid kernels; and then he had his house in T'ai. — 6. He sent down (to the people) the fine cereals; there was black millet, double-kernelled black millet, millet with red sprouts, with white sprouts; he extended over it (sc. the ground) the black millet and the double-kernelled, he reaped it, he (aered it =) took it by acres; he extended over it the millet with red sprouts and with white,

he carried them on the shoulder, he carried them on the back; with them he went home and initiated a sacrifice. — 7. Our sacrifice, what it is like? Some pound (the grain), some bale it out, some sift it, some tread it; we wash it so as to become soaked, we steam it so as to become steamed through; and then we lay plans, we think it over, we take southernwood, we sacrifice fat; we take a ram to sacrifice to the Spirits of the road; and then we roast, we broil, in order to start the following year. — 8. We fill (food) in the *tou* vessels, in the *tou* and the *teng* vessels; as soon as the fragrance ascends, God on High (tranquilly =) placidly enjoys it; the farreaching fragrance is truly (correct =) good; Hou Tsu initiated the sacrifice, and the (multitude:) people has given no offence nor cause for regret (c) unto the present day.

(a) After the sacrifice to obtain child. (b) The miraculous conception. (c) By neglecting the sacrifice.

Ode CCXLVI: Hing wei.

1. Numerous are the rushes by the road; may oxen and sheep not trample them; they become ample and take shape, their leaves are luxuriant; beloved are brothers, none are absent, all are near; some spread mats for them, some hand them stools. — 2. They spread mats, they put on upper mats; in presenting stools there are (continuous =) a row of attendants; some present cups, some offer cups in response; they wash the *tsue* vessels, they put down the *kia* vessels (before the guests); sauces and pickles are presented, some roast, some broil; there are fine viands, tripe and tongue; some sing, some beat the drum. — 3. The carved bows are strong, the four arrows are well balanced; they shoot the arrows, all alike; they arrange the guests according to their (cleverness =) skill; the carved bows are curved; they grasp the four arrows, the four arrows are as if planted (in the target); they arrange the guests according to their (not being offensive =) decorous demeanour. — 4. The descendant (of the ancestors) presides; the spirits and the sweet unclarified wine are rich; he fills the cups with a ladle, and (prays for =) wishes them a (yellow = wizened-faced =) high old age; a high old age and a (globular =) rounded back; (he does it) in order to (pull them forward =) encourage them and help them; a high old age is propitious (a); and so they increase the great felicity.

(a) The clause *shou k'ao wei k'i* must be an independent, principal clause, for it balances two analogous lines earlier in the st.: *Tseng sun wei ch'u* «The descendant (is the host =) presides» and *tsiu li wei ju* «The spirits are rich».

Ode CCXLVII: Ki tsuei.

1. We are drunk with wine; we are satiated with bounties; for the lord a myriad years; increased be your great felicity. — 2. We are drunk with wine; your viands have passed round; for the lord a myriad years, increased be your brightness. — 3. May your brightness be extensive, may your high brilliance (have =) last to a good end; the good end has its beginning (a); the representative of the

(dead) princes makes a happy announcement. — 4. What is his announcement? The pien and tou vessels are pure and fine; the guests are assisted (b); they are assisted with a dignified demeanour. — 5. Your dignified demeanour is very (correct =) good; the lord has pious sons; the pious sons will never be lacking; forever there will be given you good (things). 6. What are those good (things)? (The alleys of your house =) your house with its alleys (i. e. your big establishment); for the lord a myriad years; forever there will be given you blessing and posterity. — 7. What is that posterity? Heaven covers you with blessings; for the lord a myriad years, the great appointment and followers. — 8. What are those followers? It (Heaven) gives you young ladies and young gentlemen (children); it gives you young ladies and young gentlemen; you will be followed by grandsons and sons.

(a) It is a result of the preceding merits. (b) Assisted = encouraged to eat and drink.

Ode CCXLVIII: Fu yi.

1. The wild ducks are on the King (river); the representative of the (dead) princes comes and feasts and is at peace; your wine is clear, your viands are fragrant; the representative feasts and drinks; felicity and blessings come and (achieve, complete you =) make you perfect. — 2. The wild ducks are on the sands; the representative of the (dead) princes comes and feasts and (approves =) finds it good; your wine is plentiful, your viands are fine; the representative feasts and drinks; felicity and blessings come and (act for =) favour you. — 3. The wild ducks are on the island; the representative of the (dead) princes comes and feasts and reposes; your wine is strained, your viands are sliced; the representative feasts and drinks; felicity and blessings come and descend on you. — 4. The wild ducks are at the junction of the river; the representative of the (dead) princes comes and feasts and is (treated in temple-fashion) =) revered; the feast is in the temple, that is where felicity and blessings descend; the representative feasts and drinks; felicity and blessings come and are piled up (heavily =) amply on you. — 5. The wild ducks are in the gorge; the representative of the (dead) princes comes and feasts and is bejeweled (by the spirits); the good wine makes you merry; the roast and broiled things are fragrant; the representative feasts and drinks; there will be no after trouble.

Ode CCXLIX: Kia lo.

1. Greatly happy (a) be the lord; illustrious is his good virtue; he orders well the people, he orders well the men; he receives blessings from Heaven; it protects and helps and appoints him; from Heaven (comes the favour) that keeps him in power (b). — 2. He seeks dignity and a hundred blessings; his sons and grandsons will be a thousand, a hundred thousand; august and majestic (c), he is fit to be ruler, to be king; he does not err, he does not forget, he follows the ancient statutes. — 3. His deportment is (repressed =) dignified, his virtue is pure; he has no resentment, no hatred, he follows the path of all his peers; he receives fel-

city without limit; the (states of) the four quarters, them he regulates. — 4. . Them he regulates, he directs; the peace reaches to his friends; the hundred rulers and ministers have love for the Son of Heaven; he is not slack in the exalted place; he is the one in whom the people find rest.

- (a) Or, with Ts'i: fine and happy. (b) Properly: »From Heaven it extends him, prolongs him.«
(c) Or, with Lu: august and brilliant.

Ode CCL: Kung Liu.

1. Stauch was prince Liu; he did not sit still, he did not enjoy ease; he made baulks and boundaries, he collected, he stored, he tied up provisions in bags, in sacks; his collecting (stores) was thus extensive; he (displayed =) brought out bows and arrows, shields and dagger-axes, axes and battle-axes; and then he (opened up =) commenced his march. — 2. Stauch was prince Liu; he went and (lingered =) stayed in that plain; it was abundant, it was flourishing; it was suitable, and so he made his proclamation (sc. to settle there); then there were no long-drawn sighs (a); ascending, he was on the hill-tops, again descending, he was in the plain; what was he engirdled with? With jade and y a o stones, (scabbard ornaments =) ornamented scabbard and ceremonial knife. — 3. Stauch was prince Liu; he went to those hundred springs, he gazed at that wide plain; and so he ascended the southern ridge, he looked at the (planned) capital, the ridge lands for the capital; there he dwelt, there he lodged, there he spoke, there he talked. — 4. Stauch was prince Liu, (on the capital place he was relying, leaning =) in the capital place he was firmly settled; he came with stately movements; they supplied mat and stool; he stepped up on (the mat) and leaned on (the stool); he sent out his servants to take a swine from the pen; he served them (his followers) wine in calabash cups, he gave them food, gave them drink; he was a sovereign to them, he was a founder. — 5. Stauch was prince Liu; he widened, he extended (his realm); he measured by the shadow and (»ridged« =) made use of the ridge (b); he inspected the north-slopes, the south-slopes; he looked at the streams and springs; his army was three (singles =) units; he measured the swamps and the plains; he taxed the fields for the provision of grain; he measured the (evening slope =) west-facing slope; the settlement in Pin became truly great. — 6. Stauch was prince Liu; in Pin he sojourned; for fording the Wei he made a crossing(-place); he took whetstones and hammering stones; the settlements were well distributed; they were numerous and (having =) rich, on both sides of the Huang-stream valley, pushing upwards to the Kuo-stream valley; the lodgings were dense, they reached to both sides of the river bend (c).

- (a) The people were satisfied. (b) For the measuring. (c) Properly: »they reached to the jue i inner side and the k ü outer side of the bend.«

Ode CCLI: Hiung cho.

1. Far away we draw water from that running pool; we ladle it there and pour it out here; with that one can steam the food; the joyous and pleasant lord is the

father and mother of the people. — 2. Far away we draw water from that running pool; we ladle it there and pour it out here; with that one can wash the *lei* vessels; the joyous and pleasant lord is the one to whom the people (go =) turn. — 3. Far away we draw water from that running pool; we ladle it there and pour it out here; with that one can wash and cleanse; the joyous and pleasant lord is the one in whom the people find rest.

Ode CCLII: K'tian ngo.

1. There is a curving slope; the whirl-wind comes from the south; the joyous and pleasant lord comes and (rambles:) diverts himself and sings, and so lets forth his airs (a). — 2. Relaxed is your (rambling =) diversion, pleasant and (rambling =) easy is your rest; joyous and pleasant lord, may you (end =) fulfil your natural years and like the former princes (your ancestors) end them (b). — 3. Your domain is great and splendid, and you also grandly enrich it; joyous and pleasant lord, may you fulfil your natural years; all the Spirits make you their host (c). — 4. The appointment that you have received will be long-lasting, in happiness and felicity you shall be at peace; joyous and pleasant lord, may you fulfil your natural years, a great abundance will be yours forever. — 5. You have something to depend on, something to help you; you have filial piety, you have virtue, to lead you on and help you; joyous and pleasant lord, to the (states of) the four quarters you are a model. — 6. You are great and high, like a *kuei* sceptre, like a *chang* sceptre, with good fame, (with good contemplation =) fine to look at; joyous and pleasant lord, to the (states of the) four quarters you are a regulator. — 7. The phoenixes go flying, *χwād-χwād* (sound) their wings; again they settle and then stop; a great crowd are the king's many fine officers, the lord gives them their charges; they have love for the Son of Heaven. — 8. The phoenixes go flying, *χwād-χwād* (sound) their wings; they even (touch =) reach heaven; a great crowd are the king's many fine officers, the lord appoints them; they have love for the common people. — 9. The phoenixes sing on the high ridge; the eloeo-coccas grow on that (morning =) east-facing slope; they are dense and luxuriant; (they sing) harmoniously and in unison. — 10. The carriages of the lord are numerous and many; the horses of the lord are well-trained and swift; I have composed a few verses, in order to have them sung (d).

(a) *Yin* 音 is synonymous with the *feng* 風 air, melody of odes 259, 260, see gl. 757, cf. Tso: Ch'eng 9, where both terms occur: *n an yin an* air of the South, and *t'u feng an* air of the native country. (b) Die a good and natural death. (c) Come and enjoy your sacrificial gifts. (d) By the musicians, in your praise.

Ode CCLIII: Min lao.

The people is fatigued, it has come to (the point that) it should have a little rest; be kind to this central kingdom, and so give peace to the (states of) the four quarters; give no indulgence to the wily and obsequious (a), and so make those who are not good careful; repress the robbers and tyrants, they have not feared

the brightness (of the king); be gentle to the distant ones and be kind to the near ones, in order to (settle:) stabilize our king. — 2. The people is fatigued, it has come to (the point that) they should have a little rest; be kind to this central kingdom, so as to make it a meeting(-place) for the people; give no indulgence to the wily and obsequious, and so make the turbulent and obstreperous careful; repress the robbers and tyrants, do not let the people suffer; do not (reject =) desist from your exertions, in order to make the king (at ease) happy. — 3. The people is fatigued, it has come to (the point that) it should have a little repose; be kind to the capital, and so give peace to the states of the four (quarters); give no indulgence to the wily and obsequious, and so make those who (have no limit =) go to excess careful; repress the robbers and tyrants, do not let them do evil; be careful about your demeanour, and so keep near to those who have virtue. — 4. The people is fatigued, it has come to (the point that) it should have a little rest; be kind to this central kingdom, let the people's suffering be relieved; give no indulgence to the wily and obsequious, and so make the evil and wicked ones careful; repress the robbers and tyrants, do not let the straight be ruined; though you are small children, your (use, employment =) task is vast and great. — 5. The people is fatigued, it has come to (the point that) it should have a little peace; be kind to this central kingdom, so that the state has no injury; give no indulgence to the wily and obsequious, and so make the (clinging ones =) parasites careful; repress the robbers and tyrants, do not let the straight be (deflected =) perverted; the king wants to (consider you as jade =) find you like jade, therefore I make this great remonstration.

(a) Or, with another school: »do not follow the wily and obsequious».

Ode CCLIV: Pan.

1. God on High is very grand; but the lower people are utterly exhausted; you (a) make speeches that are not true, you make plans that are not (far-reaching:) far-seeing; you have no wise men and are (exhausted =) helpless, you are not true in your sincerity; because your plans are not far-seeing, therefore I make this great remonstration. — 2. Since Heaven now causes (difficulties:) calamities, do not be so elated; since Heaven now causes commotion, do not be so garrulous; if your words are harmonious, the people will be concordant (b); if your words are kind, the people will be tranquillized (c). — 3. Though I have a different service, I am a colleague of yours; but when I go to you and deliberate, you listen to me arrogantly; my words are about the service, do not make them a matter for laughter; the ancient people had a saying: »Consult with the grass- and fuel-gatherers». — 4. Since Heaven is now oppressive, do not jest so; the old men (among you) are clamouring, the young ones are arrogant; it is not that my words are senile, but you make cruel jests about them; if you will merely make much clamour, you cannot be saved or cured. — 5. Since Heaven is now angry, do not be boastful; your demeanour is utterly (gone astray =) at fault; the good men sit motionless

and silent (d); though the people are now groaning, there is nobody who dare (estimate me =) appreciate my words; there is death and disorder and destruction of resources, nobody has been kind to our multitude. — 6. Heaven's guiding the people is like an ocarina, like a flute, like a ch'ang jade, like a kuei jade (e); it is like taking hold of them, like leading them by the hand; leading them by the hand and nothing more; to guide the people is very easy; now when the people have many depravities, do not yourself start depravities. — 7. The great men are a fence; the great multitude is a wall; the great (feudal) states are a screen; the great (royal) clan is a support; their cherishing the virtue (is =) gives peace; the men of the (royal) clan are a fortified wall; do not let that wall be ruined; may he (sc. the king) not fear (solitariness =) to be left alone. — 8. Fear the anger of Heaven, dare not play and enjoy yourselves; fear the change (of grace) of Heaven, dare not race about; great Heaven is called (bright:) intelligent, it (reaches to =) observes your goings; great Heaven is called (clear =) clear-seeing, it (reaches to =) observes your sporting and extravagances.

(a) The ode is an officer's remonstration with his colleagues, just like the preceding ode; that this is so is clearly shown in st. 3. (b) Properly: «The harmony of the words is the concord of the people». (c) Properly: «The kindness of the words is the tranquillity of the people». (d) Properly: «The good men act the corpse», play the part of a representative of the dead at a sacrifice, who sits still and silent during the whole ceremony; here then: remain inactive, do nothing to help. (e) It is mildly persuasive, like guiding people by the sound of mild music or by the sight of fine insignia of authority — not by violence or force.

Ode CCLV: Tang.

1. Grand is God on High, he is the ruler of the people below; terrible is God on High, his charge has many rules; Heaven gives birth to the multitudinous people, but its charge is not to be relied on (a); there is nobody who has not a beginning, but few can have a (normal) end (b). — 2. Wen wang said: Alas! Alas, you Yin-Shang! Those (men) are refractory, they are (crushing and subduing =) oppressive, but they are in official positions, they are in the services; Heaven (sent down =) gave them a reckless disposition, but you raise them and give them power. — 3. Wen wang said: Alas! Alas, you Yin-Shang! You should hold on to what is right and good; the refractory have much ill-will, with false words they answer you; robbers and thieves are used in the (interior =) government, they stand up and (imprecate =) call down evil, without limit, without end. — 4. Wen wang said: Alas! Alas, you Yin-Shang! You shout and brawl in this central kingdom; you make it a virtue to heap ill-will upon yourself; you do not make (bright =) intelligent your virtue, and so you (have no disloyal ones =) do not distinguish the disloyal and perverse; your virtue is not intelligent, and so you (have no supporters =) do not distinguish the supporters, the (true) ministers. — 5. Wen wang said: Alas! Alas, you Yin-Shang! It is not Heaven that steeps you in wine; it is not right that you (pursue =) are bent on it and use it; you have erred in your demeanour; you (have no light, you have no darkness =) make no distinction between light and darkness, you shout and clamour, you turn day into

night. — 6. Wen wang said: Alas! Alas, you Yin-Shang! You are (noisy) like cicadas, like grass-hoppers, you are (chattering) like bubbling water, like boiling soup; small and great are approaching to ruin, but people still (following it walk =) pursue this course; (inside =) here you are overbearing in the central kingdom, and it extends even to (the country) Kuei-fang (c). — 7. Wen wang said: Alas! Alas, you Yin-Shang! It is not that God on High is not (correct =) good; Yin does not use the old (ways); but though there are no old and perfected men, there still are the statutes and the laws; you have not listened to them; the great appointment therefore is tumbling down. — 8. Wen wang said: Alas! Alas, you Yin-Shang! The people have a saying: »When (a tree) fallen down and uprooted is lifted, the branches and leaves are yet uninjured; the root is then first disposed of» (d); the mirror for Yin is not far off, it is in the age of the lords of Hia.

(a) Its grace may easily be lost. (b) Live to a good and natural end. (c) A country to the north-west of the Yin kingdom. (d) So the root of the state, the royal house, is disposed of, without the branches and leaves, i. e. the people coming to any harm.

Ode CCLVI: Yi.

1. A (repressed, restricted =) dignified demeanour is the counterpart of the (inner) virtue; people have a saying: »There is no wise man who has no folly; the folly of the common people is simply a natural fault; but the folly of the wise man is a (deliberate) offence. — 2. Is he not strong, the (real) man! The (states of) the four quarters take their lesson from him; straight is his virtuous conduct, the states of the four (quarters) obey him; with great schemes he stabilizes his (heavenly) appointment; with far-reaching plans he makes (seasonal =) timely announcements; he is careful of his demeanour; he is the pattern of the people. — 3. Those who are in the present, they raise disorder in the government; they overthrow their virtue, they are excessively steeped in wine; you are bent on being steeped in pleasure, you do not think of your (continuance =) heritage, you do not widely (seek =) study the former kings, so as to be able to hold fast their bright laws. — 4. And so the august Heaven does not approve of you; you are like the flow of that spring (sc. falling down headlong); may you not (indiscriminately =) all together go to ruin; rise early and go to sleep late, sprinkle and sweep your courtyard; be a pattern to the people; keep in good order your chariots and horses, the bows and arrows, the arms and weapons; and so be ready for war undertakings, and keep at a distance (a) the (tribes of the) Man regions. — 5. Make assurances of good faith to your people; observe carefully the measures of your feudal princes, and so prepare against the unforeseen; be cautious about the words you utter, be careful about your demeanour; in all things be mild and good; a flaw in a white k u e i sceptre can still be ground away; a flaw in those words (of yours), for that nothing can be done. 6. Do not (easily follow your words =) let the tongue run away with you; do not say: »I do not care, there is nobody who holds my tongue»; the words cannot (simply) pass away (b); there are no words that are not answered,

there is no kindness that is not requited; be kind to your friends, your common people, your young ones, and your sons and grandsons will be continuous, among the myriad people there will be none who do not serve you. — 7. When you see the noblemen your friends, make your countenance friendly and mild, or there is risk that you will be at fault (c); observe carefully how you are in your house; may you be free from shame even in the secluded (north-west) corner of the house; do not say: »Of the amply illustrious ones (sc. the ancestors) there are none who see me«; the arrival of the Spirits cannot be calculated; how much the less should they be made to feel disgusted (d). — 8. Make (lawful =) correct your practising of virtue, cause it to be good, cause it to be fine; be nicely careful of your demeanour, do not fail in your deportment; do not be untruthful, do not be injurious, and few will not make you their model; if somebody throws me a peach, I requite him with a plum (e); but those (young kids with horns =) precocious youths are truly disorderly youngsters. — 9. Tender is the soft wood, one strings it with silk (f); the mild and courteous men are the fundament of virtue; one who is a wise man, when I tell him my lessons, he follows the path of virtue; one who is a foolish man, on the contrary he says that I am untruthful; of the people, each one has his own mind. — 10. Oh, You youngsters! You do not know what is good or not; when I do not lead you by the hand, I show you your work; when I do not, face to face, give you orders, I take you by the ear; you allege that I do not understand, and yet I have carried you in my arms; when the people are not satisfied, who knows it in the morning and deals with it in the evening (g)? — 11. Great Heaven is very (bright:) enlightened, but I am living without joy; when I see you so (darkened =) unenlightened, my heart is very sad; I instruct you inculcatingly, but you listen to me with (slighting =) contempt; you do not use (my words) for taking instructions from them, on the contrary you use them for making cruel jests; you allege that I do not understand, and yet I am an octogenarian. — Oh, you youngsters, I tell you the old ways; if you listen to my counsels, you will have no cause for great regret; Heaven is now calamitous, it is destroying our state; the example to be taken is not far off (h); great Heaven does not err; if you deflect your virtue, you will cause the people to be greatly distressed.

(a) Or, with Han: »and (cut to pieces =) destroy«. (b) Without having their effect. (c) Properly: It is not far from there being fault. (d) Properly: satiated, »fed up with«, see gl. 9. (e) I requite good by good. (f) Making luths. Cheng says: making bows, but sī 'silk' is regularly used in the sense of 'stringed instruments'. (g) Who can afford to be dilatory. (h) This is the oft-reverting theme of the fall of the Yin as a warning example.

Ode CCLVII: Sang jou.

1. Luxuriant is that softness of the mulberry tree, beneath it, it is even (shade everywhere) (a); but if one plucks it, it will be destroyed; suffering is this lower people, unceasing is the grief of the heart; the affliction and distress are long-continued; grand is that great Heaven, why does it not have pity on us? — 2. The four stallions run vigorously; the tortoise-and-snake banner and the falcon

banner flutter (b); the disorder grows and it is not tranquillized, there is no state which is not in disorder; the people (have no multitude =) are reduced in number, they are all struck by calamity and (combusted =) destroyed; Oh! Alas! The country's course is (pressing =) critical. — 3. The country's course is a destruction of resources; Heaven does not support us; there is nowhere to settle (c); if we were to march, where should we go? The one who is a noble man holds a heart that is not violent, but who has been born a (steps =) promotor of cruelty, and caused suffering unto this day? (d). — 4. My grieved heart is very distressed; I am thinking of our domain; I was born (untimely =) at an unhappy time, I have met with the ample anger of Heaven; from west to east there is nowhere to settle; I have seen much distress; they (sc. the enemies) greatly harass our borders. — 5. I plan for you, I caution you: if the disorder increases, it will destroy you; I admonish you to (grieve over =) take to heart the anxieties; I teach you to order well the (ranks =) officials; who can grasp anything hot? — there are few who do not (first) (use washing =) moisten the hand (e); (if you say:) »What can be the good of it?», then you will all together sink in ruin (f). — 6. You are like that head-wind, one greatly loses the breath from it; the people have an eager mind, but you cause them not to come forward; (and yet) they love that husbandry, the doughty people live from it from generation to generation; the husbandry is a precious thing, to live from it from generation to generation is what they love. — 7. Heaven sends down death and disorder, it destroys our appointed king; it sends down these noxious insects (on the grain), the husbandry is utterly suffering; lamentable and pained is the central kingdom, all things together are utterly (waste =) ruined; I have no strength, and so I think of the Vaulted Blue. — 8. Now this good ruler, he is looked up to by the people; he holds a heart which has (everywhere-reaching =) all-embracing plans; he examines and is careful about his assistants; but that refractory one, he (makes =) considers himself alone good; he has his own (lungs and intestines =) inner thoughts, and (makes =) considers the people utterly foolish. — 9. Look at that middle of the forest, numerous are its deer (g); but comrades slander each other, and are not good to each other; and yet people have a saying: »In ups and downs alike (h) be good!» — 10. Now this wise man, he surveys a hundred li (he is circumspect); but that stupid man, on the contrary in his folly he is pleased; it is not so that words are inadequate, why should I then fear this (sc. be afraid of making this denunciation)? — 11. Now this good man, he does not seek (office), he does not (advance =) push himself forward; but the (hard-hearted =) unscrupulous man, he looks for it, he (reverts to it =) is ever after it; the people are greedy and disorderly; why are they a bitter poison? — 12. The great wind has its path: the deep great valleys (i); now this good man, his doings are good; but that refractory one, he (walks =) acts according to his inner dirtiness. — 13. The great wind has its path; the covetous men ruin the good; when there are (hearable words =) words deserving to be heard, you should respond; but when there are admonishing words, you are (sleepy) as if

drunk; you do not make use of the good (words), on the contrary you (make =) consider me silly. — 14. Alas, you comrades! Do I compose in ignorance? You are like those flying birds — they are also hit by arrows and caught (j); I have gone to (shade =) shelter you, but on the contrary you come and overawe me! — 15. While the people (have no limit =) go to excess, you are only rapacious and disloyal; you cause the people injury, as if you could not crush them enough; while the people are (awry =) perverse, you are only fierce and violent. — 16. While the people are unsettled, you only plunder and rob; if the rapacity is denounced (k), you again are disloyal and good at reviling; although you say: »It is not we (who are thus)», I have composed this song about you.

(a) A common metaphor: the government shades and protects all the people alike. (b) There is warfare. (c) Properly: »There is nowhere to stop and stand firm». (d) A strong indictment against the bad ruler. (e) So one must take due precautions in times of danger. (f) Properly: »Come to being immersed». (g) Amicably grazing together. (h) Properly: »Advancing and retreating». (i) The violent men act in the dark deep. (j) Though you soar proudly, you may be hit and brought down. (k) Properly: »If the rapacity is said to be unallowable».

Ode CCLVIII: Yün Han.

1. Bright is that Heavenly Han river (a), it shines and revolves in the sky; the king says: Alas, what guilt rests on the present man? Heaven sends down death and disorder, famine comes repeatedly; there are no Spirits to which sacrifices are not made, we do not grudge those victims; the k u e i jades and p i jades (b) are exhausted, why does nobody (c) listen to us? — 2. The drought is excessive, it is sultry and thundery and exceedingly hot; we have not ceased offering the y i n and s i sacrifices; from the suburban altar we have gone to the temple hall; (upwards and downwards =) to the powers above and below we have offered up and buried (sacrificial gifts); there are no Spirits which we have not honoured; but Hou Tsi is powerless, and God on High does not (approach us =) favour us; he wastes and destroys the earth below; why does he strike us? — 3. The drought is excessive, it cannot be (pushed away =) removed (d); it is fearsome, it is terrible, like lightning, like thunder; of the crowd of people that remained of the Chou, there is not an (integer =) undamaged body left; Great Heaven, God on High does not let us survive, how should we not all fear; the ancestors repress us (e). — 4. The drought is excessive, it cannot be stopped; it is fiery and burning, we have no (place =) refuge; the great fate is drawing near, we have none to look up to, done to look round to; the many princes and former rulers do not help us, oh father and mother, oh ancestors, why are you callous towards us? — 5. The drought is excessive, mountains and rivers are dried up; the demon of drought is hurtful, as if flaming, as if burning; our hearts fear the heat, our grieved hearts are as if aflame; the many princes and former rulers take no cognizance of us; Great Heaven, God on High, why does he cause us to skulk (for fear)? — 6. The drought is excessive, with all our forces we loathe and (try to) eliminate it (f); why does one (sc. Heaven) make us suffer by drought — we do not know the cause of it; our prayers for the

(year =) harvest have been very (early =) betimes, the sacrifices to the (four) Quarters and the Soil have not been late; but Great Heaven, God on High does not (think about =) consider us; we have been reverent to the bright Spirits (g), there ought to be no grudge or anger. — 7. The drought is excessive, the dispersion (has no rules =) is uncontrolled; (exhausted =) reduced to extremities are the heads of the departments; distressed are the premier minister, the director of the horse, the commander of the guard, the minister of the Royal table, the attendants; yet there is no man who is not succoured, there is nobody who cannot stay; I look up to the Great Heaven, oh how distressed I am! — 8. I look up to the Great Heaven, small are its stars; oh you dignitaries and noblemen, come brightly forward (h) (without surplus =) none remaining; the great fate is drawing near; do not abandon your (achievements =) duties; for what do I pray for myself? (I pray) in order to (settle =) give rest to all the principal officers; I look up to the Great Heaven; when will it kindly give us peace?

(a) The Milky Way. (b) Offered in sacrifice. (c) Of the Spirits. (d) By our sacrifices and prayers. (e) Disapprove of us, do not listen to our prayers. (f) By sacrifices. (g) Or, with another version: »We have reverently attended to the bright sacrifices». (h) Like the many stars in the heaven.

Ode CCLIX: Sung kao.

1. Lofty is the Sacred Mountain (a), grandly it reaches to Heaven; the Sacred Mountain sent down a Spirit who bore (the princes of) Fu and Shen; (the princes of) Fu and Shen became the supports of Chou; the states in the four (quarters) they went to (fence, be a fence to =) protect, the (states of) the four quarters they went to (wall, be a wall to =) defend. — 2. Vigorous was the prince of Shen, the king let him continue (his ancestors) in the service (b); he went and took his residence in Sie (c), to the southern states he became a model; the king charged the prince of Shao to establish the dwelling of the prince of Shen; he went up to that southern state, hereditarily to hold the meritorious charge. — 3. The king charged the prince of Shen to be a model to those southern states: »Avail yourselves of those man of Sie to make your walls»; the king charged the prince of Shao to tax the soil of the prince of Shen; the king charged the stewards to send over his (the prince's) henchmen. — 4. The work of the prince of Shen — the prince of Shao planned it; they started work on the walls, and the ancestral temple was achieved; it was achieved and it was very (far-reaching =) extensive; the king bestowed a gift on the prince of Shen: the four stallions were robust, their breast-plates with hooks were bright. — 5. The king sent to the prince of Shen a state carriage and a team of four horses: »I have planned for your residence, (nothing is like =) the best is the southern land; I bestow upon you a great k u e i sceptre, to be your treasure; go, you king's uncle, and protect the land of the south. — 6. The prince of Shen indeed went; the king gave him a parting feast in Mei; the prince of Shen turned to the south, he went indeed to Sie; the king charged the prince of Shao to tax the soil and territory of the prince of Shen, in order to furnish his provisions of

grain; and so he hurried on his march. — 7. The prince of Shen was martial, he entered into Sie; his footmen and chariooteers were numerous, in the Chou state all rejoiced: »You shall have good support»; amply illustrious is the prince of Shen, the eldest uncle of the king; in the deeds of peace and war alike he is a model. — 8. The virtue of the prince of Shen is mild and kind and straight; he tranquillizes these myriad states, he is renowned in the states of the four (quarters); Ki-fu has made the song, its verse is very great, its air is extensive and fine; it is presented to the prince of Shen.

(a) Yüe 'mountain, peak' is a word particularly used about certain sacred mountains. (b) Or, with Han: 'The king let him stand in service'; or, with Lu: 'The king promoted him to service'. (c) Or, with Lu: 'in Sü'.

Ode CCLX: Cheng min.

1. Heaven gave birth to the multitude of people, they have (concrete objects =) bodies, they have (moral) rules; that the people hold on to the norms is because they love that beautiful virtue; Heaven looked down upon the domain of Chou, and brightly approached the world below; it protected this Son of Heaven, and gave birth to Chung Shan-fu (a). — 2. The virtue of Chung Shan-fu is mild and kind and just; he has a good deportment, a good appearance, he is careful and reverent, he has the ancient precepts as his (model =) norm; he is strenuous about his fine deportment, and obedient to the Son of Heaven; he causes the bright decrees to be promulgated. — 3. The king charged Chung Shan-fu: »Be a model to those (hundred =) many rulers, continue (the service of) your ancestors, protect the king's person, give out and bring in (reports about) the king's decrees; (be) the king's throat and tongue; promulgate the government abroad; in (the states of) the four quarters it will then be (started =) set in function. — 4. Solemn (b) is the king's charge, Chung Shan-fu handles it; whether the states are (concordant =) obedient or not, Chung Shan-fu brightly discerns it; he is (bright =) enlightened and wise, and so he protects his person; morning and evening he does not slacken, in the service of the One Man. — 5. The people have a saying: »If soft, then eat it, if hard, then spit it out»; but Chung Shan-fu neither eats the soft, nor spits out the hard; he does not oppress the solitary and the widows, he does not fear the strong and the refractory. — 6. The people have a saying: »Virtue is light as a hair, but among the people few can lift it»; we (only) estimate and consider it, but Chung Shan-fu alone can lift it; we love him, but nobody can help him; when the embroidered fabric (of the royal robe) has a hole (c), Chung Shan-fu alone can mend it. — 7. Chung Shan-fu went out and sacrificed to the Spirit of the Road; the four stallions were robust; the soldiers (d) were brisk, each of them (anxiously thinking of not reaching =) afraid of lagging behind; the four stallions went bang-bang; the eight bit-bells tinkled; the king charged Chung Shan-fu to (wall =) fortify that eastern region. — 8. The four stallions were strong; the eight bit-bells tinkled in unison; Chung Shan-fu marched to Ts'i, and quick was his returning home; Ki-fu has made the song.

stately is the pure(-sounding) air; Chung Shan-fu has constant anxieties; by (the song) I comfort his heart.

(a) His coadjutor. (b) Or, with Ts'i: «majestic». (c) When the king has any shortcomings. (d) Properly: «The marching men».

Ode CCLXI: Han yi.

1. Great is the Liang-shan (a), it was Yü who put it in order (for cultivation); grand are its roads; the prince of Han received the appointment, the king himself gave him the charge: »Continue (the service of) your ancestors, do not reject my charge; morning and evening, never slacken, be respectful in your official position; the charge I give you is not easy; (stay =) keep in order the states that do not come to court (i. e. are not submissive), and so assist your sovereign. — 2. The four stallions were large, very long and broad; the prince of Han came in to an audience; with his great kuei sceptre he came in to audience with the king; the king gave the prince of Han a fine banner and pennon ornaments, a bamboo-mat cover (for the carriage) and a patterned yoke, a dark emblazoned robe and red slippers, breast-plates with hooks (for the horses), engraved (horse's) frontlets, leatheren front-rail casing (for the carriage), a short-haired covering fell (b), metal-adorned reins and metal yoke-bows (c). — 3. The prince of Han went out and sacrificed to the Spirit of the Road; he went out and lodged in T'u; Hien-fu gave him a parting feast, (there was) clear wine in a hundred hu vessels; what were the viands? Roast turtle and fresh fish; what were the vegetables? Bamboo sprouts and reed shoots; what were the gifts? A team of horses and a carriage of state; the pien and tou vessels (were there) in full number; the princes feasted. — 4. The prince of Han took a wife, the niece of the king at Fen, the daughter of Kuei-fu; the prince of Han went to meet her in the town of Kuei; the hundred carriages went bang-bang; the eight bit-bells tinkled; greatly illustrious was the splendour; all the »younger sisters» (d) followed her, in great number like a cloud; the prince of Han looked round at them, resplendent they filled the gate. — 5. Kuei-fu was very martial, there was no state which he had not gone to: for the lady Ki of Han (e) he looked for a place, there was none so pleasant as Han; very pleasant is the land of Han, the rivers and pools are large, the bream and tench are big, the does and stags are (in great number =) numerous; there are (black) bears and brown-and-white bears, there are wild-cats and tigers; he found it good and caused her to live there; lady Ki of Han feasted and rejoiced. — 6. Extensive are those walls of Han, they were built by the hosts of Yen; because the ancestors had received the charge to lean on those many Man tribes (as their subjects), the king gave the prince of Han the Chuei and the Mo (tribes); (coveringly =) extensively he received the northern states, and leant on them in the capacity of their chief; in those (regions) he made walls (f), he made moats, he made acres of fields, he made divisions for the tax; he presented (to the king) skins of leopards, of red panthers and of brown-and-white bears.

(a) A mountain tract. (b) For the front-rail. (c) The central part of the yoke: a bow gripping the neck of the horse, with a rising stem having a loop through which to pass the reins; see the gloss. (d) The younger sisters and cousins of the same generation. (e) His daughter, lady Ki, who now, through her marriage, became lady Ki of Han. (f) Properly: »Those he walled».

Ode CCLXII: Kiang Han.

1. The Kiang and the Han (rivers) were amply-flowing, the warriors formed a mighty flow; there was no rest, no recreation, they (came =) went to seek the Huai tribes (a). — 2. We brought out our carriages, we raised our falcon-banners; there was no rest, no leisure; they went to harass the Huai tribes. — 3. The Kiang and the Han were (voluminous =) large-flowing, the warriors formed a rushing flood; they regulated and disposed (the regions of) the four quarters, and reported the achievement to the king; (the regions of) the four quarters were pacified, the king's state began to be settled; then there was no strife, and the king's heart was at peace. — 3. On the banks of the Kiang and the Han, the king charged Hu of Shao: »Open up (b) the (regions of) the four quarters, tax my territories and soil, without distressing, without pressing (the people); go all through the royal state, go and draw boundaries, go and make divisions, as far as the southern sea». — 4. The king charged Hu of Shao: »Go everywhere and distribute my orders; when Wen and Wu received the appointment (of Heaven), the prince of Shao was their support; do not say: I am only a small child; the prince of Shao, you are like him; you have been active in your work, therefore I give you blessings. — 5. I give you a k u e i ladle (c), and a y u vessel of aromatic wine from black millet (d); report to your ancestors (e); I give you hills and soil and fields; from Chou you receive a charge, it (follows =) continues the charge of your ancestors in Shao»; Hu made obeisance and bowed the head; (he wished) the Son of Heaven ten thousand years. — 6. Hu made obeisance and bowed the head, in response he extolled the king's grace; he was the achiever of (the deeds of) the prince of Shao; (he wished) the Son of Heaven a longevity of ten thousand (years); bright is the Son of Heaven, his good fame never ceases; he spreads his fine virtue and unites these (states of the) four quarters.

(a) Tribes of the Huai river region. (b) Clear for cultivation. (c) Libation ladle with a jade handle in the shape of a k u e i sceptre. (d) For sacrifice in the ancestral temple. (e) Properly: »accomplished men», traditional term for dead ancestors.

Ode CCLXIII: Ch'ang wu.

1. Majestically, brightly, the king charged the minister Nan-chung in (the temple of) the great ancestors, and the Grand Master Huang-fu: »Dispose my six armies and prepare my arms; having shown your care and solicitude (a), (go and) comfort those southern states». — 2. The king told Master Yin to charge Po Hiu-fu of Ch'eng: »Assist in arraying the ranks, warn my legions and cohorts (b); go along those banks of the Huai, inspect this territory of Sü; do not loiter, do not stay; oh you three functionaries, go to your work». — 3. Majestic, awe-

inspiring, august was the Son of Heaven; the king acted slowly and safely, but he did not (relax =) tarry, he did not (ramble =) loiter; the Sü country was grandly shaken; he shook and scared the country of Sü, like a roll of thunder, like a clap of thunder; the country of Sü was shaken and scared. — 4. The king exerted his warlike ardour, as if (shocked =) roused, as if angry; he sent forward his braves (c), they shouted like roaring tigers; (widely =) extensively he massed his troops on the Huai-river banks, (repeatedly, accumulatingly =) in ever greater numbers he took crowds of prisoners; he (trimmed =) brought into order those (regions of) the Huai banks, the place for the royal hosts. — 5. The king's troops were numerous, they were as if flying, as if winged, they were like the Kiang and the Han (rivers), they were massive like a mountain (d), flowing like a river (e); they were continuous and orderly; they were immeasurable, invincible; (brightly =) splendidly they marched against the state of Sü. — 6. The king's plans were true and sincere (f); the country of Sü (came =) submitted; the country of Sü was joined (to the realm), that was the deed of the Son of Heaven; the (states of) the four quarters were pacified, the country of Sü came to court (g); the country of Sü did not swerve (h); the king returned home.

(a) In the preparations for the war. (b) For such »warnings« before battle, exhortations to bravery and threats of punishment for those who failed, see for instance Shu: Mu shi. (c) Literally: »tiger-officers«. (d) Properly: »Like a mountain's massivity«. (e) Properly: »Like a river's flow«. (f) He had only good intentions towards the people of Sü. (g) To pay homage. (h) From its allegiance.

Ode XXLXIV: Chan yang.

1. I look up to the great Heaven, but it is not kind to us; for very long we have had no peace, it has sent down these great evils; in the state nothing is settled, officers and people suffer; nocuous insects (a) gnaw and injure, there is no peace, no (limit, restraint =) moderation; the guilty ones are not apprehended; there is no peace, no cure. — 2. People have their land and fields; you, however, take possession of them; people have their commoners (b); you, however, snatch them; these who ought to be held guiltless, you on the contrary apprehend them; those who ought to be held guilty, you on the contrary let them loose. — 3. A clever man builds a city wall, a clever woman overthrows it; beautiful is the clever woman, but she is an owl, a hooting owl; a woman with a long tongue, she is a (steps =) promoter of evil; disorder is not sent down from Heaven, it is produced by women; those who cannot be taught or instructed are women and eunuchs. — 4. When they (exhaust people =) pick people to pieces, their slanderer is first entirely (cold-shouldered =) disregarded; but how can you say: »They (do not arrive =) can come nowhere, what evil can those do?«. They are like those who sell at a triple profit (c); the nobleman knows this, and (therefore) the women have no public service, they have to (rest =) abide by their silkworm work and their weaving. — 5. Why does Heaven reprove you, why do the Spirits not bless you? You (leave aside =) do not care about your great anxieties

(troubles), you only feel hatred against us; you are not good, not felicitous; your demeanour is not (up to the standard =) good; when people flee the country, the state is exhausted and distressed. — 6. When Heaven sends down (confusion =) disorder, it is really (ample =) widespread; when people flee the country, it is a grief to the heart; when Heaven sends down disorder, it is really near (the end); when people flee the country, it is a pain to the heart. — 7. Squirtting is the straight-jetted spring, it is really deep (d); oh, the grief of the heart, why is (the distress) of the present time, not before me, not after me? The distant great Heaven, there is nobody whom it cannot steady; do not disgrace your ancestors, then you will save your person.

(a) Wicked officials. (b) The common people owned by the gentry. (c) Their calumnies find eager customers. (d) So my grief has deep sources.

Ode CCLXV: Shao min.

1. Great Heaven is terrific, Heaven (massively =) heavily sends down death, and causes us to suffer by famine; the people all (flow away =) disperse and flee the country, our settlements and border lands are all waste. — 2. Heaven sends down crime and guilt, nocuous insects (a) cause disorder in the (interior =) government; the eunuchs have no respect, they are turbulent and perverse; those (are the men who) shall tranquillize our country! — 3. They are lazy and slanderous, they do not know their flaws; it is fearsome, it is terrible, for very long there has been no peace; our official positions are greatly (reduced =) weakened. — 4. It is like that year of drought: the plants are not numerous and luxuriant, they are (dry) like those bird's-nest straws; I look at this state, there are none who are not turbulent and (stopping =) obstructive. — 5. The opulence of former times, (was it not like that =) how great it was! The present distress, (is it not like this =) how great it is! Yet those ate coarse grain, these eat fine grain (b); why do they not take themselves away? They only moreover prolong this. — 6. When a pool (becomes exhausted =) dries up, is it not (a lack of affluents) from the banks? When a spring dries up, is it not (a lack) from within? (c). They spread everywhere this injury, and only moreover enhance it; will they not bring calamity on our persons? — 7. Anciently, when the former kings received the appointment, there were such as the prince of Shao; in one day he enlarged the state a hundred li; now, in one day they (compress =) reduce the state a hundred li; oh, alas, the present men! Would I not wish to have the ancient ones! (d).

(a) Wicked officials, see ode 264. (b) The men of old lived frugally, in spite of their prosperity. (c) The state has no helpers from without, no good men in the centre, in the government. This alludes to what follows in st. 7. (d) For p u s h a n g y u cf. ode 224 p u s h a n g s i y e n *Would I not wish to rest under its*.

Ode CCLXVI: Ts'ing miao.

Oh, august is the pure temple, solemn and (concordant =) acting in unison are the illustrious assistants (a); stately are the many officers, they possess a fine

virtue; they respond to and (proclaim =) extol those in Heaven, quickly they hurry about in the temple; the greatly illustrious, greatly honoured ones (b) never weary of (the homage of) men.

(a) At the sacrifice. (b) The ancestors.

Ode CCLXVII: Wei t'ien chi ming.

1. The appointment of Heaven, oh, it is august and never-ending; oh, the greatly illustrious one (a), oh, the greatness of Wen wang's virtue! — 2. With (ampleness =) ample blessings he overwhelms us, we will receive it (b); the one who greatly gives us favour is Wen wang, the descendants will (consolidate it =) preserve it steadily.

(a) The ancestor, Wen wang. (b) Or, with the reading of another school: «How shall he show his kindness to us? We will receive it (the favour)».

Ode CCLXVIII: Wei ts'ing.

Clear and continuously bright are the statutes of Wen wang; he initiated the sacrifices, and by them it has come to an achievement: the good fortune of Chou.

Ode CCLXIX: Lie wen.

1. Brilliant and fine rulers and princes (a), you have given these blessings; you have given us favour without bounds, sons and grandsons will preserve it. — 2. There are no fiefs that are not in your land (b), it is only the king who (elevates them =) establishes them; we (think of =) remember these great deeds of yours, continuously we (find them august =) revere them. — 3. Is he not strong, the (real) man! The (states of) the four quarters all obey him; greatly illustrious is his virtue, (the hundred rulers =) all the rulers make him their model; oh, the former kings are never forgotten!

(a) I. e. ancestors. (b) All feudal states in the world are subject to the Chou.

Ode CCLXX: T'ien tuo.

Heaven made the high hill, T'ai wang found it grand (a); it was he who felled the trees, and Wen wang (b) dwelt happily there; it was he who marched about (c) and K'i obtained level roads; may sons and grandsons preserve it!

(a) And made a settlement there, as described in ode 241. (b) His descendant. (c) Extending the realm and building roads.

Ode CCLXXI: Hao t'ien yu ch'eng ming.

Great Heaven had a definite charge, two sovereigns received it (a); Ch'eng wang did not dare to dwell in happy idleness, morning and evening (b) he laid the foundations of his (appointment =) great task, magnanimous and quiet; oh, continuously bright, he made (ample =) generous his heart, and so he could secure tranquillity.

(a) Wen wang and Wu wang. (b) Untiringly.

Ode CCLXXII: Wo tsiang.

1. We present our offerings, there are sheep, there are oxen; may Heaven esteem them. — 2. We should make Wen wang's (statutes =) rites (a) our pattern; we daily secure the tranquillity of the (states of) the four quarters (b); the great Wen Wang has esteemed and enjoyed them (the offerings). — 3. May we night and day fear the majesty of Heaven, and thereby preserve it (c).

(a) Or, with another school: »Wen wang's virtue«. (b) By our sacrifices. (c) What Heaven has conferred, cf. odes 269, 270, 273, 283.

Ode CCLXXIII: Shi mai.

1. He makes his seasonal tour in his state; may Heaven cherish him as a son; it has truly (helped =) favoured and (let continue =) given the succession to the house of Chou; when he shakes (overawes) them, there are none who do not shake and fear; he cherishes and mollifies all the Spirits, even to the (Spirits of the) River and High Mountain; it is truly the king who is the sovereign. — 2. Bright and brilliant is the house of Chou; it has succeeded and is on the throne; now we gather in the shields and dagger-axes, we encase the bows and arrows; we seek the fine virtue and spread it in the Hia states (a); truly the king will preserve it (b).

(a) The genuine Chinese states, as opp. to the aliens. (b) What Heaven has conferred, cf. odes 269, 270, 272, 283.

Ode CCLXXIV: Chi king.

1. Terrifying and strong was Wen wang; was it not strong, his ardour! Greatly illustrious were Ch'eng and K'ang, God on High made them august (sovereigns); from the time of those Ch'eng and K'ang, we have (coveringly =) extensively possessed the (states of the) four quarters; (bright =) clear-sighted was their enlightenment. — 2. Bells and drums peal, musical stones and flutes resound; (Heaven) sends down blessings that are very great; our deportment is very grand; we are drunk, we are satiated, felicity and blessings repeatedly come to us.

Ode CCLXXV: Si wen.

Fine are you, Hou Tsi, you are able to be a counterpart to that Heaven; you have given grain-food to our multitude, it is all due to your attainments (a); you have given us the wheat and the barley; God decreed that all should be nourished, without having these confines and (near =) narrow limits (b); the rules have been spread in all those Hia states.

(a) Properly: »There is nothing which is not your attainments«. (b) Not only in the king's domain proper but in all his vassal states.

Ode CCLXXVI: Ch'en kung.

1. Oh you ministers and officers! Be attentive in your tasks; the king regulates your achievements; come and deliberate, come and scrutinize. — 2. Oh you assistants! It is the end of the spring; what do you then further (seek =) wait

for? How are the second year's and the third year's fields? Oh, fine is the wheat and the barley, we shall (receive =) gather in their bright (grain). — 3. Bright is God on High; it has come to our having a happy year; order our multitude: »Prepare your spades and hoes!; (extensively =) everywhere we shall see the sickles mow.

Ode CCLXXVII: Yi hi.

Oh, Ch'eng wang, brightly he came and drew near: »Lead on those husbandmen to sow the many kinds of grain; quickly (open up =) break the soil on your private fields, all over the (areas of) thirty li; grandly perform your ploughing; (for ten, one thousand =) a hundredfold harvest to each pair of farmers!»

Ode CCLXXVIII: Chen lu.

1. (In numerous array =) in a flock the egrets go flying, on that western moat; our guests arrive (a), they also have that appearance. — 2. There, there is nothing to dislike, here, there is nothing to disrelish (b); may we constantly be in attendance (c), in order to perpetuate the fame (d).

(a) Dignitaries assisting at the sacrifice. (b) For the Spirits; all our offerings are perfect. (c) In the temple; properly: »May we (be there) morning and evening!. (d) Of the ancestors.

Ode CCLXXIX: Feng nien.

In this rich year there is much millet and rice; but we also have high granaries, for myriads and hundreds of thousands and even millions (of sheaves); we make wine and sweet unclarified wine; we offer it to ancestors and ancestresses and so consummate the (hundred =) many rites; (Heaven) sends down blessings that are very plentiful (a).

(a) Properly: that are very complete, in full number.

Ode CCLXXX: Yu ku.

There are blind men (musicians), there are blind men in the courtyard of Chou; we have arranged the horizontal boards and the vertical posts (forming the bell frames), the dented ornaments and the upright plumes, the (small) responding and introducing drums, the (big) suspended drums, the hand drums and the musical stones, the resounding boxes and the tiger-shaped clappers; all being complete, the music is struck up; the flutes all start, ringing is their sound; solemn and harmonious they blend their notes; the ancestors listen to it; our guests arrive, long they watch the complete performance.

Ode CCLXXXI: Ts'ien.

Oh, in the Ts'i and the Ts'ü (rivers), plunging in the deep are many fishes; there are shan sturgeons and wei sturgeons, t'iao fish, ch'ang fish, yen fish and carp; with them we make offerings and sacrifice, and so we increase our great felicity.

Ode CCLXXXII: Yung.

There are those who come, very concordant; they arrive and stand, very solemn; assisting (at the sacrifice) are the rulers and princes; the Son of Heaven is very august. — »Oh, we offer the large male animal, assist us in setting forth the sacrifice; great was my august father, he (tranquillizes =) comforts me, his pious son; of all-embracing wisdom was the man, in peace and war he was a sovereign; he appeased even the Great Heaven, he can make prosperous his descendants. — He comforts me with a vigorous old age, he (increases=) enriches me with ample blessings; I wait upon my brilliant (dead) father, and also upon my fine mother».

Ode CCLXXXIII: Tsai hien.

1. They appear before their sovereign king, they seek their emblems of distinction; the dragon banners are bright, the carriage bells and the banner bells chime, the metal-ornamented reins tinkle, happy is their brilliant splendour. — 2. They are led to appear before the shrined dead father (a), to show their piety (b), to bring offerings, to increase their vigorous old age; long they will preserve it; fine are the many favours (c); the brilliant and fine rulers and princes (i. e. the ancestors) (tranquillize =) comfort them with many blessings; they make them continuously bright in their great abundance.

(a) Properly: ch'ao k'ao «dead father of the even series in the sanctuaries». (b) Properly: filial piety; many of the feudal princes were of the Ki clan, descendants of the same ancestors as the king. (c) For the construction cf. ode 235 s i h u a n g t o s h f «fine are the many officers»; ode 276 w u h u a n g l a i m o u «oh, fine is the wheat and the barley».

Ode CCLXXXIV: Yu k'o.

1. There is a guest, there is a guest, white are his horses; in ample array and numerous, his retainers are (as if) carved, (as if) chiselled (a). — 2. There is a guest who stays one night, there is a guest who stays two nights; we hand him tethers, to tether his horses. — 3. We escort him, we attend upon him and comfort him; he has great dignity, (Heaven) sends down felicity (upon him) that is very restful.

(a) So refined; a common metaphor.

Ode CCLXXXV: Wu.

Oh, august was Wu wang, was it not strong, his ardour! Truly fine was Wen wang, he could open the way for his successors; his heir Wu (wang) received it, he conquered the Yin and (stopped=) exterminated and killed them; you (both) have established your merits (a).

(a) Since both Wen wang and Wu wang are celebrated in this ode, the last line must reasonably refer to them both.

Ode CCLXXXVI: Min yiiao tsui.

1. Pitiable am I, the little child; I have (met with =) received a house unachieved; solitary am I, in distress; oh, august dead father, for (long =) endless gene-

rations you deserve to be piously revered. — 2. I think of these august ancestors who ascend and descend in the court; I, the little child, morning and evening I will be reverent. — 3. Oh, you august kings, (continuously =) for ever you will not be forgotten.

Ode CCLXXXVII: Fang lo.

I scrutinize my deceased one, I will follow (the example of) that shrined father of mine; oh, how distressing, I have not yet (regulated =) achieved order (in the state); if later on I achieve it (a), in the sequel I shall (still) be (relaxed =) slack; I, the little child, am not equal to the many difficulties of our house; but they (the Spirits) continuously go up and down in the court, they ascend and descend in their house (b); gracing me is the august dead father, thereby preserving and enlightening my person.

(a) Properly: »if it will be that I achieve it». (b) They are ever coming to visit and protect us.

Ode CCLXXXVIII: King chi.

1. Be reverent, be reverent; Heaven is (bright =) splendid, its charge is not easy (to keep); do not say: »It is very high above» (a); it ascends and descends in its workings, and daily inspects us who are here. — 2. I, the little child, am not wise or reverent; but I will every day progress and every month advance; I will learn from those who are continuously bright in their (brightness- =) enlightenment; great is the burden on my shoulder; but it (Heaven) shows me the bright path of virtue.

(a) Taking no cognizance of our doings.

Ode CCLXXXIX: Siao pi.

I have been chastised (a), and I will guard against future calamities; nobody has caused me to be (»wasped» =) wasp-stung, I have myself (sought =) drawn upon me this bitter sting; smart indeed are those wrens, they fly up and are birds (they can escape); I am unequal to the many difficulties of my house, but I sit perched here on the smartweed (I cannot escape).

(a) Had my bitter experience, a painful warning.

Ode CCXC: Tsai shan.

They clear away the grass and the trees, their ploughing lays open (the ground); in thousands of pairs are the weeders, they go to the wet lands, they go to the field dykes; there is the master, the eldest son, the next-following son, (the multitude =) all the younger men of the family, the volunteers (a), the employees; many are those who bring food, lovable are the wives, grand are the men; sharp are the ploughs, they start work on the southern acres; they sow their many kinds of grain, those contain the life; (ample =) amply-growing are the sprouting blades, fine is every single plant, very fine are (all the) sprouts; (long-drawn-out =) in a continuous row (are =) go the weeders; and then they reap, in great crowds, richly it (the grain)

is heaped up (b); there are myriads and hundreds of thousands and even millions (of sheaves); we make wine and sweet unclarified wine; we offer it to ancestors and ancestresses and so we consummate the (hundred =) many rites; aromatic is the odour, that is the glory of the state; fragrant is the smell, that is (secures) the tranquillity of those with a great old age; it is not that temporarily it occurs for the time being, it is not that just now it is so for the present: from of old it has been thus.

(a) Properly, «the strong men», capable of doing more than their own plots. (b) Properly, «full, rich is its accumulation».

Ode CCXCI: Liang si.

Sharp-cutting are the good ploughs; they start work on the southern acres; they sow the many kinds of grain, those contain the life; there are those who come to see you, they have stowed in round baskets and square; the food brought is millet; the bamboo hats (a) are plaited, their hoes pierce (the ground), to clear away t'u plants and smartweed; the t'u plants and smartweed decay, the millets become luxuriant; they reap, stroke upon stroke, they heap it densely; (the stacks) are high like a wall, they are closely-arrayed like a comb; and so they open the hundred houses; the hundred houses are full, wives and children repose; they kill that bull that is seven feet high, curved are his horns; and so they (resemble =) imitate, they continue, they continue (the work of) the ancient men.

(a) Of the workers.

Ode CCXCII: Si yi.

The silk robes are freshly bright, they carry caps that are gem-adorned; from the hall they go to the gate-house base, from the sheep they go to the oxen; (there are) big tripods and small, the k u a n g vase of rhinoceros horn is long and curved; the good wine is (soft =) mellow; they are not noisy, not clamorous; that (is =) secures the (rest =) tranquillity of those of a great old age.

Ode CCXCIII: Cho.

Oh, fine is the king's army! According as he reared it, it was first obscure and then it became greatly bright; therefore it became very great; we have been favoured and received it; martial were the king's deeds, thereby they (had a continuance =) were lasting; this through your work is truly an army!

Ode CCXCIV: Huan.

He tranquillized the myriad states, and (reiterated the rich years =) caused repeated rich years; Heaven's charge (did not slacken =) was never remitted; the very martial Wu wang protected and held his officers; he went and (used =) held sway over the (states of the) four quarters, and was able to settle his house; oh, he was bright in the sight of Heaven, augustly he (made a replacement =) came to the succession.

Ode CCXCV: Lai.

Wen wang laboured, we receive it; he spread everywhere that (ampleness =) abundance; we go and seek to establish firmly that (heavenly) charge of this Chou; oh, the abundance!

Ode CCXCVI: P'an.

Oh, august are those Chou! They ascended the high mountains, the long, narrow ridges, the high peaks, they went along the roaring River; all under the vast heaven, to (the wishes of) all those (lands) they responded (a); that was the (heavenly) appointment of the Chou.

(a) They responded to the wishes of all the world and were welcomed as rulers; cf. ode 241, st. 5.

Ode CCXCVII: Kiung.

1. Sturdy are the stallions, in the distant open grounds; among those sturdy ones there are white-breeched black ones, there are light-yellow ones, there are black ones, there are bay ones; with their chariots they go bang-bang (without limit =) for any length of time; the horses are good. — 2. Sturdy are the stallions, in the distant open grounds; among those sturdy ones, there are grey-and-white ones, there are brown-and-white ones, there are red ones, there are black-mottled grey ones; with their chariots they go strongly (without time limit =) for any amount of time; the horses are of fine quality. — 3. Sturdy are the stallions, in the distant open grounds; among those sturdy ones, there are flecked ones, there are white ones with black manes, there are red ones with black manes, there are black ones with white manes; with their chariots they go grandly without becoming tired; the horses are active. — 4. Sturdy are the stallions, in the distant open grounds; among those sturdy ones, there are dark-and-white ones, there are red-and-white ones, there are hairy-legged ones, there are fish-eyed ones; with their chariots they go vigorously without swerving; the horses (run =) are fleet.

Ode CCXCVIII: Yu pi.

1. Well-fed, well-fed, well-fed are the teams of bays; morning and evening they (sc. the officers) are in the palace; in the palace they are very bright; (in numerous array =) in a flock go the egrets, the egrets go and alight (a); the drums (sound) *iwen-iwen*; when drunk they will dance; they go to rejoice together. — 2. Well-fed, well-fed, well-fed, are the teams of stallions; morning and evening they are in the palace; in the palace they drink wine; in a flock go the egrets, the egrets go flying; the drums (sound) *iwen-iwen*; when drunk they will go home; they go to rejoice together. — 3. Well-fed, well-fed, well-fed are the teams of iron greys; morning and evening they are in the palace; in the palace they feast; from this time forth the years will be (having =) rich; the lord has (good =) luck, he transmits it to his grandsons and sons; they (the officers) go to rejoice together.

(a) The courtiers are likened to a flock of brilliant egrets, cf. ode 278, gloss 1095.

Ode CCXCIX: P'an shuei.

Oh, pleasant is the semi-circular water (a), we gather its cress; the prince of Lu has come, we see his banners; his banners flutter, the sound of the bit-bells (goes) *χwád- χwád*; without distinction between small and great, all follow the prince in his going. — 2. Oh, pleasant is the semi-circular water, we gather its t s a o - waterplants; the prince of Lu has come, his horses are vigorous, his fame is bright; he looks fine, he smiles; without (anger =) impatience he teaches us. — 3. Oh, pleasant is the semi-circular water, we gather its *Brassenia*; the prince of Lu has come, by the semi-circular water he is drinking wine; he has drunk the good wine; for long there will be given him a rare old age; he has followed that long road (b), and subdued all this multitude. — 4. August is the prince of Lu, reverently he makes bright his virtue; he is careful about his deportment, he is a pattern to the people; he is refined in peace and martial in war; brightly he goes to the illustrious ancestors, there are none (of them) whom he does not revere; for himself he prays for their blessing. — 5. Very bright is the prince of Lu, he is able to make bright his virtue; he has made the Hall of the semi-circular water, where the Huai tribes come and submit; martial are the braves (c), by the semi-circular water they present the cut (enemy) heads; the good examiners (d) are like *Kao Yao*; by the semi-circular water one presents the captives. — 6. Stately are the many officers, they are able to enlarge the (virtuous hearts =) virtue of their hearts; martially they went on the warlike expedition, to keep at a distance those (tribes of) the south-east; they are splendid and august, they do not shout, do not raise their voice, they do not report in contention with each other; by the semi-circular water they (present =) announce their deeds. — 7. The horn(-adorned) bows were long and curved, the bundled arrows were numerous; the war chariots were large; the footmen and charioteers were never weary; they vanquished the Huai tribes, who are (now) very good and not rebellious; you made strong your plans, and the Huai tribes were utterly conquered. — 8. Fluttering are those flying y a o birds, they settle on the grove of the semi-circular water; they eat the fruits of our mulberry trees, and (cherish =) comfort us with their fine notes; far away are those Huai tribes, but they come to present their treasures, big tortoises, elephant tusks; they largely present us with southern metal.

(a) The semi-circular moat of the P'an kung archery school, see gloss 854. (b) To the south-east, see st. 5—8. (c) Properly: «tiger-officers». (d) Who have to question the prisoners; *Kao Yao* was a mythical sage, «minister of crime» to Shun, see *Shu, Yao tien* (*Shun tien*).

Ode CCC: Pi kung.

1. The Closed Temple is still; it is (built) very solid, board upon board; majestic was Kiang Yüan, her virtue was (not deflected =) without fault; God on High made her (ample =) fruitful; without injury, without hurt, fulfilling her months but not late, she bore Hou Tsi; he sent down to them (the people) a hundred blessings, the glutinous millet and the panicled millet, the slowly ripening and the quickly

ripening grain, the early sown and the late sown grain, the pulse, the wheat; he (coveringly =) extensively possessed the lands below, and caused the people to sow and reap; there was paniced millet and glutinous millet, there was rice and black millet; he extensively possessed the lands below, continuing the work (a) of Yü. — 2. A descendant of Hou Tsi was T'ai wang; he dwelt on the south of (mount) K'i; he began the clipping of Shang; when it came to Wen and Wu, they continued the work of T'ai wang; he (sc. Wu wang) effected Heaven's limit (sc. to the rule of Shang), in the field of Mu: Do not break faith, do not be anxious, God on High looks down upon you; he brought together the multitudes of Shang, and was able to make his work complete; the king said: »Uncle, I set up your eldest son, and make him prince in Lu; I grandly open up for you a domain, to be a support for the house of Chou». — 3. And so he appointed the prince of Lu, and made him prince in the east; he gave him mountains and rivers, lands and fields and attached states; the descendant of the Prince of Chou (Chou kung), the son of prince Chuang, with dragon banners (he comes and) presents sacrifices; the six reins are like sinews (so strong); in spring and autumn he never (slackens =) is neglectful, he offers the sacrifices without error; the very august sovereign God, the august ancestor Hou Tsi, he sacrifices to them with red victims; they enjoy them, they approve of them, they send down blessings that are many; the Prince of Chou, the august ancestor, will also bestow blessings upon you. — 4. In autumn we set about the ch'ang sacrifice; in summer we cross-bar the horns of the white bull and the red (b); the sacrificial vases are very great, (there is) scalded and roast pigs, sliced meat and soup; (there are) pien and tou vessels, and the great foodstand; the wan dance is grand; the pious descendants are blessed; (the ancestors) make you resplendent and prosperous, make you long-lived and good, you will preserve this eastern region, the state of Lu you will have forever, you will not be injured, not break down, you will not be shaken, not overcome; you will be the peers of those of a treble age, (old) like the ridges, the hills. — 5. The prince's chariots are a thousand; there are red (lance) ornaments and green (bow) cords, two mao lances and a pair of bows; the prince's footmen are thirty thousand, there are helmets with cowries on red strings; the many footmen are a great (accumulation =) crowd; the Jung and Ti barbarians, them he (breasted =) withstood, King and Shu, them he repressed; and so there is nobody who dare to (receive =) meet us (in battle); they (the ancestors) make you (sc. the princes of Lu) prosperous and resplendent, make you long-lived and rich, with faded hair and (globular =) rounded back; in longevity you will (test each other =) vie with each other (c); they make you prosperous and great, make you aged and white-haired; for a myriad and again a thousand years you will have a vigorous old age and have no harm. — 6. Very lofty is the T'ai-shan, to which the state of Lu looks up; extensively we took possession of Kuei and Meng, and then we (enlarged =) extended our sway to the great East; we came to the lands by the sea; the Huai tribes came and joined themselves (to us); there are none who do not

(follow =) obey us; that is the achievement of the prince of Lu. — 7. Having in our keeping Fu and Yi, we then extended our sway to the seat of the Sü, we came to the lands by the sea; of the Huai tribes, the Man and Mo, and those southern tribes, there are none who do not obey (us), there are none who dare not (assent =) give their allegiance, the prince of Lu, him they (accord with =) obey. — 8. Heaven gives the prince great abundance; with vigorous old age he preserves Lu; he sojourns in Ch'ang and Hü, and restores the domain of the Prince of Chou (Chou kung); the prince of Lu feasts and rejoices; (there are) the good wife, the aged mother, the (suitable =) capable dignitaries and officers; the land and state, them he possesses; he has received much blessing, a faded hair (and yet) a child's teeth (d). — 9. The pines of Ts'u and Lai, the cypresses of Sin-fu, them they cut, them they measured, them they computed in fathoms, in feet; the pine roof-beams are large, the grand apartment is very great; the New Temple is grand, it was made by Hi Si; it is very wide and large; the myriad people, (them it accords with =) for them it is appropriate.

(a) Properly: the succession, inheritance, work taken over from the predecessors. (b) Which to are be sacrificed in the autumn. (c) Test each other to see which of you can reach the highest age: a competition in longevity. (d) Still youthful and vigorous, with the undamaged teeth of a boy.

Ode CCCI: No.

How rich, how ample! We set up our hand-drums and drums, we beat the drums (greatly =) loudly, and rejoice our illustrious ancestors; the descendant of T'ang hastens forward and arrives; they (the ancestors) comfort us with (completion =) perfect happiness; the hand-drums and drums din, resounding are the notes of the flutes; it is both harmonious and peaceful, following the sounds of our musical stones; oh, majestic is the descendant of T'ang, august is his music; the bells and drums are ample(-sounding), the w a n dance is great; we have fine guests; are they not also at ease and pleased? Of old, in ancient times, the former people instituted it; meek and reverent, morning and evening, we perform the service respectfully; they look favourably upon our winter and autumn sacrifices; the descendant of T'ang presents them.

Ode CCCII: Lie tsu.

1. Oh, oh, the illustrious ancestors, constant are their blessings; (there are) repeated bounties without limit, they reach to the places of you all (a); we have filled in (in the sacrificial vessels) the clear overnight-wine, and they recompense us with (completion =) perfect happiness; there is also the well-seasoned soup; we are careful and quiet, we come forward and arrive silently; now there is no contention; they comfort us with a vigorous old age, a high (b) longevity without end. — 2. There are bandaged wheel-naves (c) and ornate yokes; the eight bit-bells tinkle; and so we go forward and present our offerings; we have received a charge that is vast and great; from Heaven is sent down prosperity, rich years that are

very abundant; we come forward, we come and present our offerings; they send down blessings without limit; they look favourably upon our winter and autumn sacrifices, the descendant of T'ang presents them.

(a) Word for word: 'They reach to your those places'. (b) Properly: 'yellow' = 'faded'. (c) When the dignitaries go to the temple.

Ode CCCIII: Hüan niao.

1. Heaven ordered the black bird to descend and bear Shang; he dwelt in the land of Yin that was very vast; of old God gave the appointment to the martial T'ang; he regulated and set boundaries for those (states of the) four quarters. — 2. And then it (Heaven) charged the sovereign extensively to hold the nine possessions; Shang's first sovereign received an appointment never imperilled; when it rested with the descendant of the Martial King (i. e. T'ang), the descendant of the Martial King, Wu Ting, had none whom he did not vanquish; with dragon banners and ten chariots he (went and) presented the great sacrificial grain. — 3. The Royal domain was of a thousand li, that was where the people (of our tribe) settled; but he (also) delimited and set boundaries for those (states between the) four seas. — 3. The (states between the) four seas came (in homage), they came in crowds; the great (circle =) encircling boundary (a) was the River; that Yin received the appointment was entirely right; a hundred blessings they bore.

(a) Of the Yin state proper.

Ode CCCIV: Ch'ang fa.

1. Deep and wise was Shang; for long there had appeared its good omens; the waters of the deluge were vast; Yü laid out the lands of the earth below; he delimited the great outer states, the wide (circle =) encircling boundary was long; the house of Sung began to become great; God appointed their child to bear Shang. — 2. The Dark King martially (disposed =) established order; when he received a small state, it prospered, when he received a large state, it prospered; he (himself) followed the rules of conduct without (transgressing =) error, and then he saw that they were set in function; Siang-t'u was illustrious; beyond the seas there was (trimming =) order. — 3. God's commands were never disobeyed; all down to T'ang they were all alike (in this); T'ang came down (not late =) in good time; his wisdom and reverence daily (arose =) advanced; brightly he advanced (slowly =) steadily; God on High, him he revered; God charged him to be a model to the nine circumscriptions. — 4. He received the small k'i u jade and the large k'i u jade (regalia), and thus was badged and ensigned by the states below; he (sustained =) received the grace of Heaven; he was not forceful, not pressing; he was not hard, nor (too) soft; he spread his government (tranquilly =) gently; all the blessings he (collected =) combined in his person. — 5. He received the small kung-pi jade and the large kung-pi jade, and (thus) was magnified by the states below; he received the favour of Heaven; extensively he applied his valour, he was not shaken, not moved, not fearful, not afraid; all the blessings he

united in himself. — 6. The Martial King then set out, killingly he grasped the axe; he was like fire so blazing; and so there was nobody who could dare to check us; luxuriantly there were three new shoots (sc. of the enemy houses), but they could not advance, not prosper; the nine possessions were brought into order; Wei and Ku were smitten, and K'un-wu and Kie of Hia. — 7. Formerly, in the middle period (a), there was one who was majestic and awe-inspiring, truly a Son of Heaven (b); there was sent down to us a minister, that was O-heng; he assisted the king of Shang.

(a) Of the Shang house. (b) Sc. T'ang, the «Martial King».

Ode CCCV: Yin Wu.

1. Brisk was that Wu (Ting) of Yin, he rushed and attacked King-Ch'u; to their full (extent =) depth he entered its defiles, he brought together the multitudes of King; (trimmed =) brought into order was their (place =) region; that was the work of the descendant of T'ang. — 2. You King-Ch'u, you dwell in the southern region of the state; anciently there was T'ang the Achiever; all from those Ti and K'iang, there were none who dared not come and bring offerings; there were none who dared not come to audience; Shang will have them forever. — 3. Heaven charged the many princes to establish the capital in the tracks of Yü (a); about their (service =) work of the year they came to audience; »do not chastise and punish us, in husbandry we have not been slack». — 4. Heaven charged (the king) to go down and inspect; the people below were reverent; there were no disorders, no excesses, they dared not be lazy or indolent; it charged him in the states below grandly to establish their happiness. — 5. The city of Shang was (orderly =) carefully laid out, it is the centre of the four quarters; majestic is its fame, bright is its divine power; in longevity and peace it protects us, the descendants. — 6. They ascended that King mountain; the pines and cypresses were pillar-like; they cut them down, they brought them, they hewed them square, they cut them (into shape); the pine beams were long, the many pillars were large; the temple hall was achieved, it was very still.

(a) Where Yü had trodden.

SOME WEAPONS AND TOOLS OF THE YIN DYNASTY

BY

BERNHARD KARLGREN

The publication of this paper should properly have been postponed until after the war, for several reasons. First and foremost, two albums of An-yang finds have been published¹⁾ to which I have not had access, and the materials they contain may prove to be of considerable importance for the problems treated here. Secondly, I should have needed a survey of the treasures in museums and private collections in Europe and America which have any bearing on our subjects. Since there are no signs that conditions will so improve as to make it possible to fill these gaps in my documentation within the next few years, I have thought it better to publish the article as it stands, the manuscript having been ready for the press for a long time.

The finds made in An-yang in recent decades are now sufficiently comprehensive to enable a survey to be made of the weapons characteristic of the Yin dynasty. The excavations of the Academia Sinica have been carried out with scientific method but their results have not yet been published to any appreciable extent, so that the provenience of most of our materials can only be ascertained from the reports of dealers and antiquarians who have acquired the specimens from the people on the spot. Fortunately a good many such reports are, on the whole, quite trustworthy, and though they cannot be conclusive regarding individual specimens, the testimonies possess a decisive value when a whole series of independently acquired specimens combine to show that a certain type flourished in An-yang. Special gratitude is due to Mr. Orvar Karlbeck, who in the most painstaking way has verified the data concerning the provenience of a great many objects. Sometimes he has bought them himself in the very village of Siao-t'un, or in the adjacent city of An-yang, sometimes he has taken the trouble, when in Peking or Shanghai considering the purchase of a specimen reported to come from the Yin capital, to go to An-yang and trace the man who has unearthed it. The information about the An-yang provenience of numerous artifacts given by the antiquarian Huang Tsün (in his albums *Ye chung p'ien yü*) are likewise very reliable, as is testified by the intrinsic, stylistic consistency of the materials published by him. Further valuable information has been contributed by W. C.

¹⁾ S. Umehara, *Selected Ancient Treasures found at An-yang*, 1940; Huang Tsün, *Ye chung p'ien yü III*, 1942.

White (Illustrated London News 1935, 1936). The plates 1—33 below contain exclusively specimens thus reported to have been unearthed in the Yin capital. The figures in our list of 187 specimens below, distributed in XV classes, correspond to the figures in the plates. Thus, for instance, in class III, no. 28 is the axe illustrated in pl. 5: fig. 28.

Class I.

1. Socketed spear-head. Sharply triangular blade, triangular loops on the socket. Very slight central ridge. Socket continues into the blade only 1 cm. L. 16 cm. MFEA (K. 11276: 88). An-yang.
2. Nearly triangular blade, only rounded off in the back part, sides of blade still quite straight. Socket continues to about 1/3 of the length of the blade. Slight ridge on socket. Inscr.: T a y ü (probably: «For the great rain sacrifice»). The specimen forms part of a sacrificial set (with ritual vessels and the axe 126 below), see Karlgren, BMFEA 16, p. 14. Ye chung p'ien yü II, hia 18. An-yang.
3. Blade still fundamentally triangular, but sides curving slightly outwards. Socket continues to the point of the blade. Ill. Lond. News, Apr. 1935. An-yang.
4. Same type as the preceding. Malmö Museum. An-yang.
5. Same type as 3, 4, but socket decorated. L. 25 cm. Academia Sinica. (Studies presented to Ts'ai Yuan P'ei I, pl. 1; also Ill. Lond. News, Aug. 1931). An-yang.
6. (Not ill. here). Shape same as 3—5, but socket going only 2/3 of the length of the blade (is the socket square?). Academia Sinica. (Pelliot, Studies in Chinese Art and some Indian Influences 1936, pl. II, fig. 6). An-yang.
7. Blade leaf-shaped. Central ridge on blade, but not on socket. L. 25 cm. Academia Sinica. (Studies . . . Ts'ai I, pl. 1). An-yang.
8. A similar type, but with base of socket apparently strengthened into a kind of ring (? see plate). Academia Sinica (Preliminary Report of Excavations at An-yang I, pl. 9). An-yang.
9. Blade long, front-part approximately triangular, back part forming two flanges on sides of socket, with attachment holes at the base. Socket quite square in section. L. 20 cm. MFEA (K. 11276: 89). An-yang.
10. Similar to 9, but with a leaf-shaped depression as décor in centre of blade. Malmö Museum. An-yang.
11. (Not ill. here). A specimen practically identical with 10. Spencer Churchill coll. An-yang.
12. Similar to the preceding. Yin time inscr. («S i t s i s u n») on front part of socket. Yü Sing-wu coll. (Shuang kien yi ki kin t'u lu, hia 37). An-yang.
13. Broader blade than the preceding. Yin inscr. (Y a h i n g) on socket. Yü Sing-wu coll. (Shuang kien, hia 38). An-yang.
14. Blade much broader in the leaf-shaped front part (sides curving slightly outwards), back part forming only very narrow flanges. Yin inscr. (Y a h i n g) on base of socket. Ye chung II, hia 10. An-yang.
15. A very wide socket. Details of construction not discernible in the plate. Yin inscr. (Y a h i n g) on base of socket. Ye chung I, hia 5. An-yang.
16. Leaf-shaped blade of »jade«; end of bronze socket widening into a heart-shaped part that grips the blade. Ye chung I, hia 4. An-yang.—Here and in the following I put »jade« in quotation marks, thereby indicating that I cannot know whether the specimen is of real jade or only of some jade-like stone.
17. Same type but longer socket. Winthrop coll. (Ye chung I, hia 14). An-yang.

18. Similar to the preceding, but blade longer, gripping-end of socket semi-circular, socket inlaid. Raphael coll. (Ye chung I, hia 13, also in Chinese Exhibition Lond. 1935—36, pl. 20). An-yang.

19. (Not ill. here). A «jade» blade of the same type. Ye chung II, hia 27, An-yang.

Class II.

20. Socketed celt: axe with square section. Academia Sinica (Studies . . . Ts'ai I, p. 93). An-yang.

21. Adze with semi-circular section. Ac. Sin. (Ibid.). An-yang.

22. Adze with square section, but one broad-side wider than the other. Ac. Sin. (Ibid.). An-yang.

23. Axe with square section, slightly tapering towards the edge; broad sides curving slightly outwards. Décor which proves that it forms part of a set, together with ritual vessels, see Karlgren, BMFEA 16, p. 13. L. 16 m. MFEA (K. 12015). An-yang.

24. Forms a pair with the preceding. L. 16 cm. Seligman coll. (publ. in Antiquity 1938). An-yang.

25. Axe (or rather chisel) with square section, slightly tapering towards the edge; décor: t'ao t'ie and hanging blades. L. 12 cm. MFEA (K. 12283). An-yang.

25 a. (Not ill. here). An axe practically identical in shape and décor on the broad side, but with a Yin symbol (Y a h i n g) on the narrow side, in San tai ki kin wen ts'un 20: 49.

26. Similar to 25, but slightly widening towards the edge. L. 18 cm. Academia Sinica (Studies . . . Ts'ai I, pl. 1). An-yang.

27. Very similar to the preceding, but section not quite square. Ye chung II, hia 11. An-yang.

Class III.

28. Axe, square, but for a slight curve in the edge; shaft-hole with oval section (tube shorter than the shoulder of the blade), and stud on the back. Blade quite thin, striped with raised parallel lines. Shaft-hole slightly asymmetrically placed, but stud in the central axis of the axe. L. 12.5 cm. MFEA (K. 12013). An-yang.

29. Similar axe, but raised lines meeting at an angle on shaft tube, stud widening into a button-like shape. L. 11.7 cm. MFEA (K. 12012). An-yang.

30. Asymmetrical placing of the shaft-hole more pronounced, including the position of the stud. Stripes on blade continue over shaft-hole. One side of blade curving slightly outwards. L. 13 cm. MFEA (K. 12010). An-yang.

31. Stud placed in central axis. Shaft-hole slightly prolonged into a tube (broken on one side). L. 14.5 cm. MFEA (K. 12009). An-yang.

32. Shaft-tube slightly longer on one side. Narrow blade, thick at the base, becomes thin towards the edge. L. 15 cm. MFEA (K. 12014).

33. Big asymmetrical shaft-tube (unstriped), asymmetrically placed stud, narrow blade. L. 11.5 cm. MFEA (K. 12011). An-yang.

34. Stud in central axis, only one central raised line. Blade widening towards the edge, thus more akin to the following group. Shaft-hole of same length as shoulder of the blade. L. 13.8 cm. MFEA (K. 12008). An-yang.

Class IV.

In this large and important group, the tang — always square or rectangular — with or without shaft-hole, is generally asymmetrically placed, sometimes only

slightly, sometimes very strongly. The blade is likewise often asymmetrical, one side curving outwards more strongly than the other. This general asymmetry varies from being almost imperceptible, as in specimen 35, to being exceedingly pronounced, as in specimen 40. This having once been pointed out, it will not be repeated in the individual descriptions. We arrange the axes here thus: we first describe those with blades that are longer than broad and afterwards those that have broader blades. It should be emphasized that this does not imply that one type is considered older than the other. An-yang does not represent the «first phase» of the Chinese bronze age; on the contrary, its richness and variety of styles and types is extraordinary and presupposes a long previous evolution. We are therefore not in a position to judge whether the long or the broad axe is «primary»; this question can only be decided when one day finds are made in some centre that was earlier than An-yang.¹⁾

35. Axe with shaft-hole. On base of tang a Yin inscr. (Y a h i n g), flanked by two figures. Hellström coll. An-yang.

36. Shaft-hole fluted, tang inlaid. Nelson Gallery of Art, Kansas City. An-yang.

37. Shaft-hole walls extended so as to grip the back of the blade; on this part dragons with «bottle horns» and the figures characteristic of the «segmented flanges» of the ritual vessels. On tang a t'ao-t'ie. Karlbeck coll. An-yang.

38. Slits serving as attachment holes on shoulder of blade, and circular attachment hole in tang. On blade, at base of «hanging blades», three circles in raised lines filled with 6 studs round a central stud. This décor element, which also occurs on ritual vessels (raised round bosses with similar studs, e. g. square Ting in Jung Keng, Shang Chou yi k'i fig. 129), is highly interesting, for it is a feature handed down from pre-historic times, cf. our fig. 190 (pl. 34), a sherd from Huei-tsuei in Kansu (Andersson's 4th period). Sumimoto coll. Yin date proved by the Y a h i n g symbol on the tang.

39. Attachment slits and hole as in the preceding. On blade, at base of «hanging blades», three raised circular bosses with traces of studs like those on 38 above. On tang, t'ao-t'ie in thin, raised lines. Louis Clarke coll. An-yang.

40. No attachment holes. On blade, décor very similar to that of the preceding two, the studs in the circles quite visible, though strongly corroded. Traces of textiles on axe, studied in detail by Vivi Sylwan, BMFEA 9. Traces of the wood of the shaft across inner part of tang. L. 21.5 cm. MFEA (K. 11090: 36). An-yang.

41. Attachment holes as in 38. Traces of t'ao-t'ie décor on tang (strongly corroded). On blade, two birds, their beaks projecting, and two gaping dragons, their bellies turned towards the birds. L. 24 cm. MFEA (K. 11327). An-yang.

42. Similar to the preceding, but the faintly traced bodies seem to indicate beaked dragons rather than birds; between them a cicada. The two big connected spirals below the dragons are really a distortion of a t'ao-t'ie mouth, cf. 49 below. Hellström coll. An-yang.

43. No attachment holes. T'ao-t'ie on tang and blade. Malmö Museum. An-yang.

44. Attachment holes as in 38. Observe the teeth in the t'ao-t'ie figure on the blade. On tang an animal (on the other side of tang a t'ao-t'ie). Hellström coll. An-yang.

¹⁾ For this reason, Yetts's terminology: «first phase» = Yin art as known from the An-yang culture, seems to me to be singularly unfortunate. An-yang is sure to represent not the «first phase» but at least the second, possibly the third or fourth of the Chinese bronze age.

45—47. (Not ill. here). Three axes of the same shape as the preceding, and the same kind of t'ao-t'ie on the blades. One (Ye chung I: hia 8) with slits and tang hole, on the tang a character: a man with an axe on the shoulder; one (Ye chung I: hia 10) no slits but a big tang hole, no décor on tang; one (Ye chung II: hia 20) no slits, small tang hole, traces of t'ao-t'ie on tang. All An-yang.

48. Same type, strongly corroded. The t'ao-t'ie on tang may have had inlay L. 18.5 cm. MFEA (K. 11090: 37). An-yang.

49. Same type as the preceding series, but blade broader. Gilt (see J. G. Andersson, BMFEA 7, p. 37). Oeder coll. An-yang.

50. (Not ill. here). A very similar axe, but on tang two vertical dragons flanking two characters: a man lifting a child. Ye chung I: hia 9. An-yang.

51. On blade a scaly dragon in open-work; on tang two vertical dragons and Yin inscr. (Ya hing and fu «father»). L. 18 cm. MFEA (K. 11328). An-yang.

52. Same type but larger and broader. Coll. of H. R. H. the Crown Prince of Sweden. An-yang.

53. On blade, two antithetical dragons forming a t'ao-t'ie. Nelson Gallery of Art (also in Ye chung II: hia 19). An-yang.

54. Rare type. Nearly symmetrical, square tang hole, big round hole in blade, probably for some precious stone. Ye chung II: hia 22. An-yang.

55. On blade, t'ao-t'ie in high relief and mouth in open-work. On tang, a dragon with head turned back. Oppenheim coll. An-yang.

56. Unusually broad axe. At base of »hanging blades« there are whorl-circles. Hellström coll. An-yang. For shape, cf. an axe of unknown provenience in the Eumorfopoulos coll. (Yetts I, pl. 75).

57. Axe of »jade», with short lugs at shoulders of blade. Ye chung I: hia 15. An-yang.

Class V.

58. Axe with triangular blade, attachment slits in shoulders and round hole in tang, as is common in the preceding group, and a big hole in the centre of the blade, probably for some precious stone; from this a ridge to the point of the axe. Tang asymmetrically placed, and axis of the axe slightly curved. A big and heavy specimen. L. 27 cm. MFEA (K. 12344). An-yang.

59. Asymmetry of the tang even more pronounced. On tang a dragon. Ill. Lond. News, Apr. 1935. An-yang.

60. Asymmetry of the tang slight. Blade less broad than in 58, 59. On tang two snake-like figures. In centre of blade a whorl-circle. Ridge marked by a well-defined raised band, two narrower bands going slantingly outwards from front of whorl-circle. Yü Sing-wu coll. (Ye chung I:hia 4, and Shuang kien:hia 13). An-yang.

Class VI.

The axes in this class are always more or less asymmetrical insofar that the central axis curves slightly downwards (towards the side of the shaft) and that the blade has an edge on the lower side curving slightly inwards, whereas the upper edge always forms a more or less »convex» line. The degree of this general curvature of the axe varies considerably: in cases like 61 it is barely perceptible, in cases like 64 it is more pronounced, but it is never very strong. The effect of a symmetry is heightened in one sub-group by the »wing» of the blade at the shoulder being noticeably broader on the lower side, whereas the other sub-group has equally

broad wings (or very nearly so). The sub-group with broader lower »wing« therefore generally has a broader shoulder in proportion to the length of the blade, whereas the other gives a longer and narrower impression. There is regularly a slight ridge along the axis of the weapon, which continues over the shaft-hole. In some cases the blade rises smoothly from both sides into a narrow ridge-line in the centre. In other specimens this line is further emphasized by forming the centre of a slightly raised band, clearly set off against the rest of the blade. (All this having once been pointed out, it will not be repeated in the individual descriptions). The tang is mostly square, but there is a special group with a differently shaped tang, see 80 below.

61. Good specimen of the first sub-group, long and narrow, asymmetry very slight. On the tang a symbol: a man carrying an axe on the shoulder. A powerful and heavy weapon. L. 22.7 cm. MFEA (K. 11324). An-yang.
62. Tang inlaid with turquoise: two kneeling men flanking a vessel. L. 25.5 cm. MFEA (K. 11090: 40). An-yang.
63. (Not ill. here). An axe identical in shape but with bare tang. Academia Sinica. An-yang.
64. Tang striped with parallel lines. L. 25.5 cm. MFEA (K. 11090: 41). An-yang.
65. Same type, central band less pronounced. British Museum. An-yang.
66. Tang with t'a o - t'i e, probably originally inlaid. Seligman coll. An-yang.
67. Tang inlaid with a symbol (some kind of signal pole?). Blade somewhat shorter and broader, leading over to the next sub-group. Ye chung I: shang 45. An-yang.
68. A good example of the broader type. On tang an undecipherable symbol. L. 22.5 cm. MFEA (K. 11322). An-yang.
69. Another symbol on the tang. L. 23 cm. MFEA (K. 11323). An-yang.
70. (Not ill. here). Almost identical in shape, tang apparently bare. Ill. Lond. News, Aug. 1931. An-yang.
71. On tang, two men flanking an indefinable object; certainly originally inlaid. Ye chung I: shang 43. An-yang.
72. Asymmetry of the »wings« very pronounced. On tang a symbol common on ritual vessels: a man holding a child. Ye chung I: shang 42. An-yang.
73. Tang inlaid: two vertical dragons flanking a man. Ye chung I: shang 44. An-yang.
74. Another symbol on the tang. Ill. Lond. News, Apr. 1935. An-yang.
75. On tang two characters, the one Y a h i n g (Yin time symbol). Ye chung II: hia 11. An-yang.
76. Lower »wing« still considerably broader than the upper, but blade longer, thus assuming an intermediary position between the first, narrow type (61—67) and the second, broad type (68—75). Spencer Churchill coll. An-yang.
77. (Not ill. here). Very similar to the preceding. On tang a character. Ill. Lond. News, May 1935. An-yang.
78. (Not ill. here). A very similar specimen, but with a Y a h i n g (Yin) inscr. on the tang. San tai 19: 19.
79. In lower »wing« an attachment slit (a very unusual feature). Ye chung I: shang 46. An-yang.

Instead of the usual square tang the four following have a rounded tang, yet with a tooth-like projection on the lower side (the side towards the shaft). The meaning of this shape of the tang, which reverts in the following class VII, is very enigmatical.

80. This axe belongs to the narrow type with symmetrical »wings». On the tang, inside a line congruent with the contour of the tang, a dragon's head(?). Ye chung I: hia 3.

81. (Not ill. here). Same narrow type. On the tang a Ya hing (Yin inscr.). San tai 19: 18.

82. A broader type, though the »wings» are not quite symmetrical. On tang the same line congruent with the contour, and filled with unknown symbols. Ye chung II: hia 12. An-yang.

83. Broad type, with nearly symmetrical »wings». On tang a Ya hing with a tree(?). Ye chung II: hia 16. An-yang.

Class VII.

This class corresponds to the more symmetrical sub-group in the preceding. There being no shaft-hole, the tang must have been inserted in a cleft shaft or through a slit in the shaft.

84. Very nearly symmetrical axe, the »concave» line of the lower edge being almost imperceptible. There are no lugs, but since there is no attachment hole either, there must in all probability have been lugs now broken off. Academia Sinica (Prelim. Report III pl. 5). An-yang.

85. Curvature of the central axis almost imperceptible. Tang placed exactly in the middle. No attachment hole. Louis Clarke coll. An-yang.

86. Tang likewise placed quite centrally. Academia Sinica (Prelim. Report III, pl. 5). An-yang.

87. Prominent lugs, line between them slightly raised. Attachment hole. On tang some undecipherable symbols. Ye chung II: hia 17. An-yang.

88. Attachment slits and hole. (Lug on one side only, the other broken?). Rudiments of t'a o - t'i e on base of blade. Two characters on tang. Ye chung II, hia 15. An-yang.

89. Same rounded tang with »teeth» as in class VI above. In décor on tang a line congruent with the contour of the tang, as in cl. VI. Lugs evidently broken off. Yü Sing-wu coll. Shuang kien, hia 6. An-yang.

90. Similar to the preceding. Same coll. Ibid. hia 3. An-yang.

91. Slightly broader type than the preceding two. Same shape of tang, same line congruent with the contour, inside it an inscr. which shows that it belongs to a set, together with some ritual vessels and with our celts 23 and 24 above, see Karlgren, BMFEA 16, p. 13. Same coll., Ibid. hia 4. An-yang.

92. Jade axe with no lugs but attachment hole and a semicircular indentation at base of tang. L. 22 cm. MFEA (K. 12244). An-yang.

93. »Jade» axe narrower than the preceding. Ye chung I: hia 18 b. An-yang.

94. »Jade» axe, same type. Base of tang striped (cf. above). Ibid. An-yang.

95. »Jade» axe similar to 93. No attachment hole, but a hole in base of blade (for precious stone?). Ye chung II: hia 25. An-yang.

96. »Jade» axe. Ye chung I: hia 18 a. An-yang.

97. »Jade» axe of broader type. Ye chung I: hia 17. An-yang.

98. »Jade» axe with strongly curved axis, but tang placed right in the middle of the blade. Ill. Lond. News, Apr. 1935. An-yang.

99. »Jade» axe. Curvature of the central axis further emphasized by the tang sloping steeply downwards (towards the shaft), although placed right in the middle of the base of the blade. Ye chung II: hia 16. An-yang.

Class VIII.

This class may seem to resemble the preceding very closely, but it differs from it on a fundamental point: the tang is placed so asymmetrically that its upper margin forms a continuous line with the upper edge of the blade (or very nearly so), which entails that the lower edge of the blade protrudes considerably, often very strongly, below the lower margin of the tang (107 as opposed to 85 of class VII).

100. A good example of the comparatively long and narrow type. On tang a whorl-circle. British Museum. An-yang.

101. Lugs probably broken off(?). On tang some symbols, which were probably inlaid. Ye chung I: shang 48. An-yang.

102. On tang a t'a o - t'ie with »bottle horns«. Yü Sing-wu coll. Shuang kien: hia 10. An-yang.

103. Tang (with another symbol) here broader. Ye chung I: shang 49. An-yang.

104. (Not ill. here). Very similar in shape to the preceding, but tang bare. Lugs broken off. Academia Sinica. Prelim. Report III: pl. 5: 2. An-yang.

105. Blade here somewhat broader at base. Ye chung I: shang 47. An-yang.

106. Ye chung II: hia 13. An-yang.

107. In this and the following, the blade is much broader at the base in proportion to the length than in the preceding types. On tang the figure of a Ting tripod. Yü Sing-wu coll. Shuang kien: hia 1. An-yang.

108. Same coll., ibid. hia 2. An-yang.

109. On tang a figure with two eyes. Jung Keng coll. Sung chai ki kin sü lu 126. An-yang.

110. On tang, undecipherable figures. Ill. Lond. News, Apr. 1935. An-yang.

111. Here, as in the two following, there are holes in the base part of the blade, apparently too small to be intended for precious stones. On tang, whorl-circle flanked by fishes. Coll. of H. R. H. the Crown Prince of Sweden. An-yang.

112. On tang, a much dissolved dragon figure. Seligman coll. An-yang.

113. Narrower blade, tang rounded with tooth (cf. 80 above), with line congruent with the tang contour and the figure of a man inside. Ye chung II: hia 14. An-yang.

114. (Not ill. here). A very similar specimen, but with nothing inside the line on the tang. Academia Sinica. (Pelliot, Studies in Chinese Art . . . , pl. II, fig. 5). An-yang.

115. Line on tang inlaid. Central ridge on blade fairly pronounced, which is rare in this class. Seligman coll. An-yang.

116. Blade here broader. Shi er kia ki kin t'u lu: Chu 27. On tang, Yin inscr. (Y a h i n g).

117. »Jade« blade, unusually broad. Nelson Gallery of Art, Kansas City. An-yang.

Class IX.

In this class, as in the preceding, the upper edge of the blade and the upper margin of the tang form a continuous, more or less curved line (with very few exceptions), and the tang is not short, as in classes VI—VIII, but elongated into a bent-down animal's head. In many cases only the contour of this head remains, and the surface has been filled with dragon figures.

118. The head on the tang is drawn in fine raised lines. A careful examination of the specimen has shown that there have been no lugs. Traces of the shaft are visible. A

curious feature is that the raised central line is quite straight, not following the slightly curving axis of the weapon. L. 29 cm. MFEA (K. 11092: 32). An-yang. — A very interesting parallel to this weapon is the one in our fig. 189 (pl. 34). It has the same animal's head, but drawn in incised lines. There are strong lugs, though they are not placed at right angles to the blade. The weapon was acquired in Lo-yang and should be dated in the early Chou time. L. 29 cm. MFEA (K. 11092: 11).

119. The animal's head has probably been inlaid. A slight initial tendency to open-work appears under the beak, otherwise the whole tang is solid, as in the preceding. Eye quite clearly represented below the crest. Very small lugs. L. 28 cm. MFEA (K. 11035: 100). An-yang.

120. Similar to the preceding, but open-work also at the back of the head. Strongly corroded. Considerable remnants of the wood of the shaft. On the blade, rich incrustations containing textiles of several kinds, in which the weapon has been wrapped. L. 27.7 cm. MFEA (K. 11343). An-yang.

121. (Not ill. here). Same type. Ye chung II: hia 9. An-yang.

122. Open-work more elaborate. Eye still visible, slightly in front of the crest. Attachment hole in tang, rare in this class. On the base of blade a small hole which does not go through the rather thick blade. L. 30 cm. MFEA (K. 11342). An-yang.

123. Eye quite deformed. British Museum (publ. in British Museum Quarterly 1933). An-yang.

124. Head similar to 122, but blade shorter and broader. Louis Clarke coll. Anyang.

125. On base of blade, a dragon figure; rest of blade »jade». Burchard coll. An-yang.

126. Here, quite exceptionally, the tang is placed right in the middle of the base of the blade. Inscr. inside the animal's head: Ta yü, showing that it belongs to a group composed of a spear-head and several ritual vessels, see specimen 2 above. Ye chung I:hia 1. An-yang.

127. A very thin and coarsely executed specimen, being a summary outline of the weapons of type 119 et seq. A ming k'i weapon for use as burial gift. Tang not quite so asymmetrically placed as in those above. L. 25 cm. MFEA (K. 11344). An-yang.

128—132. (Not ill. here). Five specimens of the same kind as the preceding but with slight variations. Academia Sinica (Prelim. Report I, pl. 6). An-yang.

133. Here only the outline of the animal's head of type 118 et seq. has been preserved, and the surface has been filled with the figure of a dragon turning its head towards the blade. Evidently meant for inlay. Blade long and narrow. L. 29 cm. MFEA (K. 11326). An-yang.

134. A similar type. Ill. Lond. News, Apr. 1935. Photo there too poor to show the décor, but the type is important on account of the very long and narrow blade. An-yang.

135. Broader blade. On tang, gaping dragon. E. von Rosen coll. An-yang.

136. Dragon figure very much dissolved. Badly corroded specimen. L. 23.5 cm. MFEA (K. 11092: 30). An-yang.

137. (Not ill. here). The tang of a similar weapon with a highly dissolved dragon, inlaid with turquoise. Ill. Lond. News, May 1935. An-yang.

138. (Not ill. here). Same type as 136, dragon almost entirely dissolved. Small hole in base of blade. L. 23 cm. Academia Sinica (Studies . . . Ts'ai I, pl. 1). An-yang.

139. (Not ill. here). A very similar axe. Academia Sinica. An-yang.

140. Similar type. L. about 25 cm. Academia Sinica (prelim. Report I: pl. 7). An-yang.

141. Dragon almost entirely dissolved, but eye still discernible. Yü Sing-wu coll. Shuang kien: hia 14. An-yang.

142. Dragon dissolved, but eye discernible; ornamentation on blade, as well as on a raised band along the axis. Pillsbury coll. An-yang.

143. A much broader type, with no lugs but attachment slits, tang placed less asymmetrically. Dragon seen *en face*. Yü Sing-wu coll. Shuang kien: hia 12. An-yang.

144. Same very broad type, but tang again applied in a line with upper edge of blade. Shaft-hole (very rare in this class), and slit in lower »wing« of blade. L. 23 cm. Academia Sinica (Studies . . . Ts'ai, pl. 1). An-yang.

145. This curious specimen, with »jade« blade, has a symmetrically placed tang, which is so degenerate as to bear only a very slight resemblance to the original head shape. Louvre Museum. Pelliot, Jades archaiques, pl. 3, and Ye chung I: hia 13. An-yang.

Class X.

146. Plain knife, back nearly straight, but slightly outward-curving towards the point; the entire edge forms a gentle curve. L. 15 cm. Academia Sinica (Studies . . . Ts'ai, pl. 1). An-yang.

147. A coarse and primitive knife, with sharp, angular back. Handle and back of blade form an S curve. Edge has a very gentle curve. Rounded point. L. 22.5 cm. MFEA (K. 12087: 11). An-yang.

148. S curve very slight. Blade long, with sides at first running nearly parallel, and then tapering gradually towards the point curving gracefully outwards. On base of blade two figures: a knife and a tortoise(?). Yü Sing-wu coll. Ye chung I: hia 7. Anyang.

149. Big ceremonial knife, with the same slight S curve of handle and back. Blade broader at the base, so as to give the edge a pronounced S curve. Along the back, the »segmented flanges« well-known from ritual vessels, and along this a decorated band with strongly deformed dragons. Ill. Lond. News, Apr. 1936. An-yang.

150. Similar to the preceding, but most of the blade of an almost uniform breadth, only close to the point taking a sharp bend outwards. Hellström coll. An-yang.

151. Of quite the same shape as the preceding, but undecorated. A single character: *kao* »announcement« (in the temple?) on blade. Ye chung I: hia 6. An-yang.

152. (Not ill. here). A practically identical knife, minus the graph. Ill. Lond. News, Apr. 1935. An-yang.

153. Blade of the same shape as the preceding ones, handle in the shape of a dragon. Ill. Lond. News, Apr. 1935. An-yang.

154. Here about 1 cm. of the plain handle is seen, over which a dragon bites. Unfortunately the blade is broken off, so that we cannot know how the point turned. L. 13.5 cm. MFEA (K. 12018). An-yang.

155. A big, coarse knife. Long, straight back, with attachment slits, turning sharply to form a bold curve. L. 48 cm. MFEA (K. 12203). An-yang.

Class XI.

155 a. Ring-headed knife, with a stud on the ring. Handle and back first form a straight line, then the back curves out slightly towards the point. Almost uniformly broad blade, with bands of cross-stripes in several places. Ill. Lond. News, Apr. 1935. An-yang.

156. Ring-headed knife with a very slight S curve, the shape almost exactly the same as in 150 above. L. 20 cm. MFEA (K. 12050). An-yang.

157. Similar type, but curvature somewhat bolder, blade slightly broader. Louis Clarke coll. An-yang.

158. Same curve as the preceding, but blade tapering towards the point. Ill. Lond. News, Apr. 1935. An-yang.

159. Same type, but more slender and narrow. Ibid. An-yang.
160. A much more pronounced S curve. L. 25.5 cm. MFEA (K. 12022). An-yang.
161. Handle and back form a slightly inward-curving line (by this I mean: bending in the direction of the edge). L. 27.5 cm. MFEA (K. 11325). An-yang.
- 161a. A similar type. Round the handle has been rolled a band of some bast-like material. L. 29 cm. MFEA (K. 12020). An-yang.
162. A similar type, but blade less broad. L. 17.5 cm. MFEA (K. 12048). An-yang.
163. Curvature of the back very slight indeed. L. 15.5 cm. MFEA (K. 12053). Anyang.
164. Line of the handle and back curving strongly inwards, but a faint trace of an outward curve close to the point. L. 22 cm. MFEA (K. 12052). An-yang.
165. Line of handle and back entirely inward-turning. Fairly broad blade. L. 19.5 cm. MFEA (K. 12051). An-yang.
166. Narrower blade and longer handle. Curve the same. L. 17.5 cm. MFEA (K. 12054). An-yang.
167. Very slender knife. L. 22 cm. Academia Sinica (Studies . . . Ts'ai I, pl. 1). An-yang.
168. L. 16 cm. MFEA (K. 12047). An-yang.
169. L. 17.3 cm. MFEA (K. 12046). An-yang.
170. Hanoi Museum. An-yang.
171. Ring adorned with three studs. A score running length-wise in the middle of the handle. Line of back curving markedly inwards, yet with a very faint trace of an outward bend close to the point. A protruding point like a lug at base of blade on the cutting-edge side. »Length 14 inches». Ill. Lond. News, Apr. 1935. An-yang.
172. Very similar type. On the handle a »fish-spine» pattern, at both ends of which double rows of tooth-like triangles meeting alternately. L. 28.5 cm. MFEA (K. 12087: 70). An-yang.

Class XII.

173. Knife with jingle or rattle head. The S curve exaggerated through the point's curving outwards very boldly. Lug at base of blade. L. 26 cm. MFEA (K. 11090: 35). An-yang.

Class XIII.

174. Knife with animal's head, probably a horse's head. Handle and back form an inward-curving line. L. 26 cm. MFEA (K. 12023). An-yang.
175. Same inward-curving line. Lug at base of blade. Handle perforated length-wise. Academia Sinica (photo kindly given me by Professor Li Chi). An-yang.
- 176—178. (Not ill. here). Three knives very similar to the preceding. Academia Sinica (I have not been able to ask for permission to illustrate them). An-yang.
179. Knife with head of an Argali sheep. Handle perforated like the preceding, decorated with parallel, slanting raised lines (cf. 154 above) L. 28 cm. Ecke coll. (G. Ecke in Chung Tê hüe chí, Sinologische Arbeiten 1943). An-yang.
180. Knife with ibex head. Slanting raised lines, like the preceding, on back of neck. Blade broken off, so that the curvature cannot be ascertained. L. 11.7 cm. MFEA (K. 12017). An-yang.
181. Knife with elk-like head. L. 30 cm. Ecke coll. (Ecke, op. cit.). An-yang.

Class XIV.

182. Dagger with strongly stylized animal's head, which can only be understood with reference to the preceding. A big and powerful weapon. L. 39.5 cm. MFEA (K. 12087: 8). An-yang. A typical An-yang patina.

183. Broader blade, reminiscent of class VII above. Head on handle damaged, a loop on top of the head having been broken. L. 26.5 cm. MFEA (K. 12021). An-yang.

Class XV.

The object in this class, which has jingles at the ends (e. g. 186), was called by Hamada in the Sumitomo catalogue (1919) *k’i-lin g* »banner bells» (an explanation based on this definition of a remotely similar object in the Sung-time catalogue *Po ku t’u lu*). This was followed by Koop (1924): »jingle for a banner». Yetts (Eumorfopoulos Cat. I, p. 65) mentions this explanation but adds that Li Kuang-t’ing suggests in his *Ki kin ch’i ts’un* (1859) that it is a »horse’s forehead jingle». This explanation, however, has not been accepted, for in the Japanese album *Shū kan i hō* (Relics of Han and Pre-Han dynasties) 1932 this object is still described as »decorative bells for the top of a banner staff», and Umehara (*Shina kodō seikwa III*, 1933) again calls it *k’i-lin g* »flag bells». It is difficult to see how an object of this shape could be attached to »the top of a banner staff». In the London Exhibition of 1935 the object was styled simply a »jingle», which says nothing. On the other hand, in the Ill. Lond. News, May 1935, White calls type 185 »a horse jingle» and »harness ornament», thus accepting in a general way Li’s idea that it has to do with horses, yet without committing himself to any more precise idea of how it was attached. Nevertheless, Li Kuang-t’ing’s view is in fact certainly the best. He gives no reason for his interpretation and no text in support of it, but he is undoubtedly right. In Chuang-tsī: Ma t’i we find: (horses living in freedom are very happy; but:) »If we put the yoke on their necks, with the yü e t’i moon-like frontlet displayed on all their foreheads» (then they become very restive). The term yü e t’i »moon forehead(-piece)» is an excellent name for our object in question, the central part of which has the shape of the moon crescent, and there can be no doubt that we have such a yü e t’i here.

184 (a, b). Horse’s forehead ornament, with horse-heads at the ends. L. »12 inches». Ill. Lond. News, May 1935. An-yang.

185 (a, b). Beam inlaid with turquoise. L. »12 inches». Ibid. An-yang.

186 (a, b). Horse’s forehead ornament, with jingles at the ends. On the beam, t’ao-t’ie heads and a boss for some precious stone. L. 36 cm. Karlbeck coll. An-yang.

187 (a, b). A simplified type, with only a small disc at the end, instead of a jingle or animal’s head. Undecorated. On the beam a character (a bird). L. 40 cm. Karlbeck coll. An-yang.

188. A splendid specimen, with antithetical crouching tigers on the beam, jingles formed like horned dragon’s heads. L. 37.5 cm. MFEA (K. 12087: 2). An-yang.

* * *

The preceding survey of 192 specimens (50 of them belonging to the MFEA), which may be fairly safely said to belong to the Yin culture of An-yang, cannot by any means pretend to exhaust the types of weapons, celts and forehead ornaments characteristic of that culture. As already stated in my introductory remarks,

I have not had access to two An-yang albums published in 1940 and 1942, which doubtless contain specimens of importance in this connection. Furthermore, I am aware that the Royal Ontario Museum possesses a fine set of An-yang specimens, among them many weapons, and that the Academia Sinica has excavated »hundreds of weapons.¹⁾ Other Far Eastern, American and European collections, both public and private, no doubt possess a great many An-yang artifacts which I have not been in a position to take into account. But the above list, such as it is, is useful, since it clearly defines certain leading types as being typical of the Yin culture.

It should be pointed out that the mere fact that a specimen »comes from An-yang» does not prove that it is of Yin time. On the contrary, the risk of erroneous conclusions in this respect is excellently expressed by Pelliot in these lines:²⁾ »On leaving the railway station one sees a whole field of ancient tomb sites which, in the course of the last twenty years, have been excavated in a haphazard and unscientific manner. They have yielded a large number of antiquities dating from the earliest period of Chinese history down to mediaeval times. These relics, however, are of practically no value to scholarship». It is therefore of decisive importance that in each of our classes above there should be safe *points d'appui* evidencing that the *types* as such belong to the Yin era: either by being represented by a number of specimens correctly excavated by the Academia Sinica; or by having Yin-time inscriptions (Ya hing, Sitsisun); or by having a décor that is characteristic of the Yin era, such as we know it from a great many ritual vessels, the Yin date of which is safely established. These proofs, in part external, in part intrinsic, are quite sufficient to establish that our classes illustrated above are really typical of the Yin civilization of An-yang.

Our survey of Yin-time weapons and tools could give occasion for various historical and archaeological discussions, but I shall confine myself to one only, the vexed question of the relations between the Yin art and the »Animal style» of Northern Asia.

* * *

The fact that there are historical connections between the Nomad Animal Style and the Chinese bronze art proper, long before the much discussed Han era, has been fully documented long ago. In the period of the Chinese Huai style (roughly 650—220 B. C.) the Nomad art of the northern confines of China (Ordos, Sueiyüan) exercised a strong influence over Chinese art (B. Karlgren, BMFEA 9, p. 97—112). Still earlier, the typical Nomad Animal-Style element »animal enroulé» crops up in China on bells of the Middle Chou period (M. Loehr, Das Rolltier in China, O. Z. 1938). But even prior to that period certain interrelations have

¹⁾ Pelliot in Studies in Chinese Art and some Indian Influences, 1936, p. 55.

²⁾ Op. cit. p. 52.

been felt to exist. As early as in 1925, W. P. Yetts voiced this idea in general terms: »It is sufficient to suggest the plausibility of a thesis that dwellers on the banks of the Yellow River three thousand and more years ago may have originated conceptions which were carried westward by many agencies and in many guises; some may have returned to their land of origin, after having undergone modifications¹⁾. In 1935, when some finds reminiscent of the Nomad Animal style cropped up in An-yang, W. C. White expressed this belief more strongly: »The objects from the »Elephant tomb» give us the earliest forms of the Animal Style, normally associated with Scythia . . . The Yellow River region, for the present, must be conceded to be the earliest source known of the Scythian and Siberian Animal Style, as touching the continent of Asia²⁾. And in 1939 Yetts reverts to the question: »This merging of different species (sc. of animals in the décor) is one of the features, recognized as characteristic of the »animal style» art, which, occurring among the most ancient Chinese bronzes, led me thirteen years ago to venture the theory that China may have contributed to the origins of the »animal style». Since then data in support of the theory have multiplied, and they will be published in my forthcoming work on the ritual bronzes³⁾. I do not know whether Yetts had in mind, *inter alia*, some of the weapon types discussed here.

White's conclusion may seem simple and inevitable: animal-style objects have undeniably been found in An-yang (White: »approximate date twelfth century B. C.»); the »Animal Style» of Siberia (Minussinsk region) has not been considered anything like so old (cf. below), and that of the westernmost province (Scythia) is not older than the 7th c. B. C.; consequently China is the earliest source of this style. But the problem is far from being as simple as it might appear.

It is evident that the decision depends upon the date of An-yang on the one hand, and on that of the North-Asiatic Nomad Animal style on the other.

As to the date and fate of the Yin capital An-yang, Yetts has given a good summary of the learned discussions between leading Chinese scholars.⁴⁾

Unfortunately nearly all their *points d'appui* are texts of Han and later times and therefore of very little documentary value.

Let us start with the question of the fall of the Yin dynasty and its capital An-yang. There are two schemes for the chronology of the Shang-Yin dynasty, the »orthodox» one and that of the Pseudo Chu shu ki nien (»Bamboo Annals»):

	Orthodox chronology	Pseudo Chu shu
Beginning of dynasty	1766	1558
P'an Keng from	1401	1315
Last year of dynasty	1123	1051

¹⁾ Chinese Art, Burlington Magazine Monographs 1925, Yetts p. 43.

²⁾ W. C. White in Ill. Lond. News, May 18th 1935.

³⁾ W. P. Yetts, The Cull Chinese Bronzes, p. 31.

⁴⁾ W. P. Yetts, the Shang-Yin Dynasty and the An-yang finds, JRAS 1933.

Neither of these schemes has any documentary value. The former is the result of computations made by Han-time scholars, codified in the *Li pu* of Liu Hin, and is incorporated in the *Lü li chí* of the *Han shu*. The Pseudo *Chu shu* is a comparatively recent concoction. The text printed and translated by Legge (Chinese Classics III) differs widely from the original and authentic *Chu shu ki nien*, which was unearthed in 281 A. D., as is proved by a great number of quotations from the genuine *Chu shu* in various ancient works. The Pseudo *Chu shu* deviates from the quotations of the authentic version incorporated in the *T'ai p'ing yü lan* (977 A. D.) and the concoction must therefore date posterior to the 10th century. Above all, hardly any of the figures for the length of the reigns given in the Pseudo *Chu shu* are to be found in any early quotations. Thus the two chronologies given above are equally void of value.

Accordingly Yetts, basing himself on a calculation made by H. Maspero,¹⁾ tries to reach a conclusion about the end of the Yin by independent means. He reasons as follows. From the year 841 B. C. Chinese chronology is safely established (see Chavannes, M. H. vol. I, introd.). There were 10 Chou kings anterior to that date. «Allowing an average of 15 years to each reign,²⁾ we arrive at 991 B. C. for the establishment of the dynasty». Now this is an exceedingly curious argumentation. Even a child knows that statistics are not applicable to small numbers. If it had been a question of a line of 100 kings, there might have been some excuse for this kind of calculation. But for computing the reigns of 10 kings it is of course quite unallowable. Maspero and Yetts find that not only the 281 years (1122—842 inclusive) of the orthodox chronology, but also the 209 years (1050—842) of the Pseudo *Chu shu* chronology are far too long a period for 10 kings, and they therefore operate with a maximum of 150 years (15 years per reign). It is easy to demonstrate how utterly foolish this computation really is. After the first 10 Chou kings, the following 10 kings (11th—20th) reigned (after an interregnum 841—828) from 827—607, i. e. 221 years; the next-following 10 kings (21st—30th) reigned from 606—376, i. e. 231 years. The first 10 emperors of the Han dynasty ruled from 206—7 B. C., i. e. 200 years; the 10 emperors of the Ts'ing dynasty ruled from 1644—1911, i. e. 268 years. Thus, so far from the Pseudo *Chu shu* chronology, with its 209 years for the first 10 kings, being improbable, it is on the contrary very much what we should expect, on the analogy of the following 20 kings. There is nothing at all impossible about it, on the assumption that there was at least one exceptionally long reign, which was in fact the case of Mu wang (see below).

From the loose computations of Maspero and Yetts, which lead nowhere, we pass on to real text data. These are of several kinds.

First, the authentic *Chu shu ki nien* is not entirely lost, but numerous quotations from it in ancient literature have been culled by Wang Kuo-wei and edited in his

¹⁾ H. Maspero, *La Chine antique*, p. 46.

²⁾ Yetts adds that even 15 years probably is too high an estimate.

collected works.¹⁾ Now the Chu shu was written early in the 3rd c. B. C. (see Chavannes MH. I, p. CLXXXIX), at a time when the feudal courts still possessed and kept with great veneration the genealogical lists in their ancestral temples. Above all, of course, the data of the sacred Chou house, the grand-royal family, must have been perfectly known to the author. Even about the Shang-Yin dynasty he could have detailed knowledge, for its genealogical lists were kept by its descendants, the princes of Sung, and Sung was not annihilated until 286 B. C.

Secondly, Mencius (Meng-tsī) has an exceedingly important passage, to which we shall revert presently.

In the third place, the Yi Chou shu and Kuan-tsī have entries bearing on one important point, and which corroborate each other (The pre-Han date of Kuan-tsī has often been doubted, but erroneously, see BMFEA 1, p. 172; and the Yi Chou shu, often quoted by Si-ma Ts'ien, is very heterogeneous, but chapter Ming t'ang kie here drawn upon is one of its oldest — clearly pre-Han, as shown by its language and style).

In the fourth place, some bronze inscriptions contain valuable data.

Compared with these first-rank Chou-time sources, all the speculations of scholars of the Han and later dynasties are of no value whatever. We shall make use of these sources in three independent paragraphs (I—III).

I.

We extract the following items:

A. Kuan: Siao wen: »When Wu wang had vanquished Yin, in the 7th year he died». Yi Chou shu: Ming t'ang kie: »When they had vanquished Chou (the last Yin king), after 6 years Wu wang died». (These two entries are not conflicting, for the former counts inclusive of the year of conquest, the latter exclusive — a quite common divergence in the mode of expression in the early texts).

B. »During the reigns of Ch'eng and K'ang the realm was peaceful and the punishments were not applied *for 40 years*». (Chu shu ap. comm. on Wen sūan: Hien liang chao).

C. »In Chao wang's 16th year we attacked Ch'u King». (Chu shu ap. Ch'u hüe ki 7).

D. »In Mu wang's 37th year we attacked Yüe» (Chu shu ap. comm. on Wen sūan: Hen fu). »37th year» may seem a high figure, but there are early traditions that Mu wang reached a very high age. In Shu: Lü hing it is said that he was on the throne as a centenarian, and the same is said in Lietsī: Chou Mu wang.

E. »In the 15th year, 5th month, 2nd quarter, on the day jen - w u, Kung wang was in Chou». (Ts'o Ts'ao Ting inscr., ap. Cheng sung t'ang ts'i ku yi wen 3: 31).

F. »In the 32nd year, 3rd month, 1st quarter, on the day jen-ch'en, the king

¹⁾ Ku pen Chu shu ki nien tai kiao, in: Hai ning Wang shi yi shu.

was in Chou, in K'ang wang's temple». (Kuo Yu Ts'ung Ting inscr. ap. K'i ku shi ki kin wen shu 2:15). For this inscr. referring to Li wang, as is proved by Wang Kuo-wei, see BMFEA 8, p. 42.

G. »From Mu wang's extinguishing the Yin to Yu wang (inclusive), there were altogether 257 years». (Chu shu ap. Tsi kie on Shī ki: Chou pen ki).

We shall now draw up a table of the first 10 Chou kings:

- | | |
|--------------------|-------------------------------|
| 1. Wu wang | 7 years (Kuan, Yi Chou shu). |
| 2. Ch'eng wang } | |
| 3. K'ang wang } | 40 years (Chu shu). |
| 4. Chao wang | »16th year» (Chu shu). |
| 5. Mu wang | »37th year» (Chu shu). |
| 6. Kung wang | »15th year» (inscr. under E). |
| 7. Yi wang | — |
| 8. Hiao wang | — |
| 9. Ih wang | — |
| 10. Li wang | »32nd year» (inscr. under F). |

If we were to start from the assumption that these dates: »Chao's 16th year, Mu's 37th year, Kung's 15th year, Li's 32nd year» happened to be the last years of the reigns of these various kings, we should already obtain a minimum of 147 years for 7 kings (Wu, Ch'eng, K'ang, Chao, Mu, Kung, Li: $7+40+16+37+15+32 = 147$). And these 7 kings alone would bring us back from 841 (the fixed date) to 988 B. C. But then it is obvious that these years: »16th year» etc. were not necessarily the last in their reigns, on the contrary, we have in all probability to calculate with additional years at least for some of the reigns. And furthermore there remain the entire reigns of 3 kings. For these three kings the orthodox chronology gives no less than 56 years (Yi 25, Hiao 15, Ih 16). But, as we shall see, it can be proved that that chronology exaggerates the length of the early reigns. On the other hand, it is evident that three reigns must occupy some time. Yi wang was the son of the preceding Kung wang, Hiao wang was the brother of Yi wang and Ih wang was the son of Hiao wang. Of their reigns Si-ma Ts'ien knows absolutely nothing, and we have no bronze inscriptions that can with any certainty be attributed to their reigns. They cannot reasonably have occupied half a century of the epoch when the Chou dynasty was at its zenith. At this point, the last (G) and most important of the data furnished by the authentic Chu shu ki nien comes to our aid. Yu wang's last year was 771. The period from Wu wang's first year to Yu wang's last year according to the genealogy on which the Chu shu is based comprised 257 years. That means that Wu Wang's first year as grand king was 1027 B. C. If we accept this, it will mean that the additional years of Chao, Mu, Kung and Li, plus the whole reigns of Yi, Hiao and Ih all together occupied 39 years, which is very much what we should expect. We have therefore every reason

to accept the Chu shu date 1027 B. C. for the 1st year Wu-wang of the Chou dynasty as highly compatible with the above testimonies as to the length of the earliest Chou reigns. This conclusion can be confirmed in two ways:

II.

Meng-tsī: *Kung-sun Ch'ou, hia*, contains an important passage: »When Meng-tsī left Ts'i, he had an interview with Ch'ung Yü on the road. Meng said: »From the (advent of the) Chou until now there are more than 700 years.¹⁾

Kiang Yung (*K'ün king pu yi*) has proved that this dialogue took place when Meng-tsī left Ts'i for the second time, in the year 312 B. C. Now Meng-tsī was exceedingly well versed in the lore of the early Chou. No Chou-time writer has dwelt so often and so enthusiastically upon the early history of the Royal House as he. If, with the present orthodox chronology, the Chou had started in 1122 B. C., he would have said »more than 800 years», not »700 years». That Meng-tsī should have made a mistake of a whole century is absolutely out of the question. When, in 312 B. C., he says: »more than 700 years», this on the one hand precludes the theory that the dynasty started about 1000 B. C., while on the other hand it confirms most convincingly the date 1027 given by the authentic Chu shu.

III.

Finally, there is one more way of testing the results of our enquiry. Si-ma Ts'ien, who was a very conscientious and cautious historian, never gives dates unless he had some earlier (Chou-time) source on which he could safely base his figures. Anterior to the established date 841 B. C. he refrains altogether from attributing any year dates to the Chou kings, as he had no sources which he considered reliable enough (see Chavannes, *loc. cit.*). However, in his chapter on the feudal State of Lu he gives exact figures for a number of the princes anterior to the fixed date 841. Evidently he possessed a trustworthy ancient genealogical list of the Lu princes. But always careful, he omits dates for the two most ancient ones, evidently because he had not access to any good source concerning them: he does not fabricate any dates in order to fill out his list. This list, therefore, is almost equal in importance to the dates of the authentic Chu shu ki nien. His list of the Lu regents is:

Chou kung Tan	—
Po K'in	—
K'ao kung	4 years
Yang kung	6 years

¹⁾ It should be observed that it is here a question of the Chou as grand kings of the empire, not of the preceding reigns of the princes of Chou (down to Wen wang); this is quite clear from the context.

Yu kung	14 years
Wei kung	50 years
Li kung	37 years
Hien kung	32 years
Chen kung's 14th year = the last year before the interregnum	= 842 B. C.

This means that the third Lu prince ascended the throne of Lu in 998 B. C.; and then the first two have to be placed before that date. On Wu wang's death (7th year of the Chou dynasty) Chou kung Tan stayed in Chou as regent under Ch'eng wang's minority, and sent his son Po K'in to carry on the reign in Lu. Thus, if we could determine the length of Po K'in's reign (which started in the year after Wu wang's death, Ch'eng wang's 1st year) and add the 7 years of Wu wang, we should obtain the date of the fall of Yin. (Even the 7 years of Wu wang alone, placed prior to 998, the initial year of the 3rd Lu prince, carries us further back than 1000 B. C.)

In Han shu: Lü li chī it is estimated that Po K'in ruled for 46 years, but there is no support whatever for this in the pre-Han texts. There is, however, an exceedingly important text in Tso chuan: Chao 12, where a prince of Ch'u says: »Anciently, my ancestor Hiung Yi together with Lü Ki, Wang-sun Mou, Sie-fu and K'in-fu served K'ang wang». K'in-fu is identical with our Po K'in. This shows that Po K'in ruled in Lu not only under the whole of Ch'eng wang's reign, but well into K'ang wang's, so that his reign must have had a considerable length. If we were to assume that he served K'ang wang under the whole reign of that king, matters would be simple. We know from the Chu shu above (B) that Ch'eng and K'ang together reigned for 40 years. This would give us 7 years Wu wang + 40 years po K'in anterior to 998 (initial year of the next Lu prince), which would carry us back to 1045 B. C. But of course we have no right to assume that Po K'in outlived K'ang wang simply because he »served him». Matters then become very complicated, for though we know that Ch'eng wang and K'ang wang together made up 40 years, we do not know the distribution of those 40 years as between the two monarchs. About Ch'eng wang we know with certainty that Chou kung had the regency during his first 7 years (that is clearly stated in Shu: Lo kao, in Yi Chou shu: Ming t'ang kie, in Han-fei: Nan, in Li: Ming t'ang wei) and that he himself wielded the power at least for some time, which gives a minimum of 8 years to Ch'eng wang. On the other hand, a now lost chapter Pi ming of the Shu king, quoted in Han Shu: Lü li chī, speaks of K'ang wang's 12th year». Thus 12 years are a minimum for K'ang. This accounts for 20 out of the 40 years of these two monarchs; but for the remaining 20 we are at a loss as to their distribution between them. And yet we may press the investigation one step further. In the Tso chuan passage (Chao 12) quoted above, it is said that Po K'in served K'ang wang together with Lü Ki. Now this Lü Ki was the son of the famous T'ai kung Lü Wang of Ts'i, who had been a pillar of the state ever since Wu wang's time.

He was still a councillor to K'ang wang in the beginning of the latter's reign, and he died in K'ang wang's 6th year (authentic Chu shu ki nien, as quoted in T'ai kung Lü Wang piao). Lü Ki succeeded him as counsellor to king K'ang wang. And since Po K'in »together with Lü Ki served K'ang wang», he must have done so at least so late as K'ang wang's 7th year. If we now calculate with absolute minimum figures, and give Ch'eng wang no more than 8 years (7 years minority, 1 year independent rule), we may conclude that Po K'in ruled in Lu at least 8 years under Ch'eng wang and at least 7 years under K'ang wang, i. e. 15 years. With 7 years Wu wang anterior to Po K'in, and a minimum of 15 years of Po K'in, together 22 years, placed prior to 998 B. C. (the initial year of the next Lu prince), we are brought back to 1020 B. C. as the latest possible year for the fall of Yin (An-yang) and the advent of the Chou. It is only reasonable, however, to assume that Ch'eng wang ruled not for one only but for several years as an adult, say for as many as the years of the regency (7), and also that Po K'in served K'ang wang »together with Lü Ki» not for one but for at least two years after the death of Lü Wang. By assuming these 7 additional years we reach the figure of 22 years for Po K'in's reign. Hence 7 years for Wu wang and 22 years for Po K'in anterior to 998 B. C. bring us back to 1027 B. C., which is the year indicated in the authentic Chu shu ki nien.

In three ways quite independent of each other: data about the kings of Chou, the pronouncement of Mencius, and the genealogical list of the princes of Lu reproduced by Si-ma with allied pre-Han sources, we have arrived at results that tally exceedingly well with the Chu shu statement that the start of the Chou dynasty took place in 1027 B. C. It is evident that figures indicated by Mencius in 312 B. C., by the author of the Chu shu early in the 3rd c. B. C. and by the unknown pre-Han genealogical list of Lu used by Si-ma Ts'ien must nevertheless be considered to be too late to constitute absolutely conclusive evidence. But the trustworthiness of the genealogical lists preserved in the feudal courts in the late Chou epoch has been confirmed in a most astonishing way: the list of Yin kings recorded by this same authentic Chu shu ki nien, on which we have largely based our above calculations, tallies very well with the facts revealed by the oracle-bone inscriptions of Yin time. If the Chu shu had such reliable information about that remote period (certainly through the Sung temple archives), we have all the more reason to accept its data for the Chou house, the history of which was, of course, infinitely better known early in the 3rd century. The date 1027 given by the authentic Chu shu, and which agrees admirably both with Mencius and with Si-ma's genealogical list for the Lu princes, must be said to be a figure that deserves high credit. It may be slightly inaccurate, but the margin of error cannot be greater than a decade in either direction. We may safely operate with the year 1027 as the best figure that we can ever arrive at for the victory of Chou over Yin. It is not an imaginary figure but a comparatively very well documented date.

As to the fate of An-yang before the fall of the dynasty in 1027 (the last year of the Yin rule thus being 1028 B. C.), there have been two widely divergent opinions, one (that of Wang Kuo-wei) upholding that it was king P'an Keng who removed to Yin; the other (Lo Chen-yü) that it was the 4th king from the end, Wu Yi, who first took up his residence there. Yetts (*loc. cit.*) has admirably summed up the arguments of the discussion. Anyone who reads his paper will easily find that most of these arguments are based on Han-time and later sources. There are really only two texts which are of prime and decisive importance, two entries in the authentic Chu shu ki nien, the work written at a time when the Sung temple archives still preserved the genealogy of the Yin dynasty:

A. »From the time when P'an Keng moved to Yin (i. e. An-yang) until the annihilation of Chou (the last Yin king) for 273 years there was no removal of the capital» (Chu shu ap. the Cheng yi comm. on Shī ki: Yin pen ki; the text really says» 773 years, »but the 7 is an obvious copyist's error for 2).¹⁾

B. »From T'ang's annihilating the Hia (dynasty) down to Shou (another name of the last Yin king), 29 kings enjoyed 496 years» (Chu shu ap. the comm. Tsie kie on Shī ki: Yin pen ki).

If we take our date 1028 (last year of the dynasty, as determined above) as our point of departure, this means that the Shang-Yin dynasty as a whole ruled from 1523—1028 B. C., and that P'an Keng established himself in Yin (An-yang), this being the residence of the dynasty from 1300—1028.²⁾

If we now turn to the opposite field of our enquiries, that of the Nomad art, the dating is much more uncertain. Since its Ordos-Mongolian province is quite undatable except by reference to Chinese *points d'appui*, one has to turn to its Siberian province (the Yenissei-Minussinsk province) to serve as basis for a discussion of the chronological problem and for determining the »oldest source» of this »animal style». In regard to this latter province Teploukhov³⁾ has established a scheme of evolution of the bronze age, in which the »animal style» artifacts appear only in the 3rd and following phases. The 3rd is called by him »the Kara-Suk period». His scheme of relative chronology (the typological sequence) seems to be generally accepted. But then Teploukhov tries to attribute approximate dates to the successive periods and establish a scheme of absolute chronology. In this scheme, the Kara-Suk phase begins circa 1000 B. C. G. Merhart had placed the beginning of

¹⁾ Moreover Chu shu quotations in T'ai p'ing yü lan 83 directly state that, after P'an Keng, the kings Siao Sin, Siao Yi, Tsu Keng, Tsu Kia, P'ing Sin, Keng Ting — all anterior to Wu Yi — resided in Yin.

²⁾ In my work »Yin and Chou in Chinese Bronzes» (BMFEA 8, 1935) I maintained, for simplicity's sake, the orthodox chronology, dating the advent of the Chou in 1122, and in consequence I dated the end of the s. c. »Yin-Chou Style» around 950 B. C. After my deductions above, I shall have to modify this into \pm 900 B. C.

³⁾ S. Teplooukhov, *Essai de classification des anciennes civilisations métalliques de la région de Minoussinsk*, in *Materiały po etnografii* IV, 1929.

this culture considerably later, and the great authority A. Tallgren, in an important article on the origin of the »Eurasian animal style» (*Acta Archaeologica* 1933) simply states (without even mentioning Teploukhov's scheme) that the Scythian animal style in the Pontic steppes of Eastern Europe was fully developed in the 7th c. B. C., and adds: »It is probable that the era of expansion of the style approximately just as early comprised the Asiatic steppe zone as far as the Chinese frontier, though indubitably early specimens of this style in Asia are unknown so far». With Teploukhov's dating of the earliest Siberian phase of the »animal style» (from 1000 B. C.) and still more so with Tallgren's (from the 7th c.) the historical priority of China as producer of artifacts in Nomad Animal style would be unassailable.

But there remains the fact that these datings are very debatable. From a mere stylistic analysis like Teploukhov's you can establish a relative chronology but never an absolute; for the latter you must have some fixed points through contacts with a datable neighbour art. It was therefore perfectly logical, on Tallgren's part, when in 1933 he maintained that the only province of the Nomad Animal style that could really be dated was the westernmost, the Scythian, the first phase of which could be placed in the 7th c. B. C. thanks to Greek contacts, and that it was not methodologically allowable to place the oldest Siberian finds earlier than this earliest historically datable Scythian province. The whole situation was radically changed at a stroke, when the finds in An-yang of various artifacts in »steppe style» were published by White in 1935 (*Ill. London News*, Apr. and May 1935). Instead of Scythia being the oldest datable province of the Nomad Animal style (7th c. B. C.), now the easternmost province: the border-lands of China (Ordos, Suei-yuan) at once came into the foreground, the oldest Animal style artifacts of which might be expected to be datable with reference to the finds in An-yang.

H. Kühn¹⁾) drew certain conclusions from the appearance of these new materials. He emphasized that there must be a historical connection, but he interpreted them in a way opposite to that of White's, insofar that he still maintained that the steppe region was the original home of the »Animal Styles» in question, and its appearance in China was due to an influence from the North. In other words, he dated the earliest stage of the steppe art from Tallgren's 7th c. and Teploukhov's 1000 B. C. back to the 13—12th centuries B. C. He sums up his opinion thus: »The Pontic Scythian and Sarmatian group is a group that has clearly been pushed forward towards the south-west, wandering with the peoples which broke into the Pontic region. The Perm group in the Urals, i. e. the Western Siberian, shows itself to be the latest and youngest group. The Ordos group must also be considered merely an outpost pushed into the Chinese cultural area, the Yenissei group thus proving itself to be the oldest and most independent group, and here must lie the roots of the Animal Style, as expounded also by Borovka. Rostovtzeff has likewise repeatedly expressed this opinion. It seems to prove true that this Animal Style

¹⁾ H. Kühn, *Chronologie der Sino-Siberischen Bronzen*, IPEK 1938.

grows directly out of be Palaeolithic, of which such good finds are known precisely from the Yenissei region (Salmony, IPEK 1930). The population indeed has never changed its hunting civilization, their mode of thought and mode of living have remained the same, and the knowledge of metal casting, obviously transmitted to them from China, must have caused them now to work in bronze the animal shapes that in earlier times were formed in bone and horn. Already about 1400—1122¹⁾ such specimens also came to the capital of China, An-yang, and the naturalistic style has in a certain sense influenced the Shang style. Just as the Chinese literary sources again and again speak of an influence from northern and western barbarians, in exactly the same way the finds tell us of the close stylistic contact between the two regions.»

The most recent author on the subject of whom I know, Gustav Ecke²⁾ inclines to the same opinion: »It is true that the rarity of the animal-head knives in China argues in favour of the opinion that they did not become truly indigenous (heimisch) to China, that they may perhaps have always been regarded as foreign ware from Siberia. The ring-head knives, on the contrary, which probably were purely practical types (Gebrauchstypen), may soon perhaps have been produced by the Chinese artisans as articles of barter with the steppe lands, from which their type had originally come, and finally they became knife-coins».

Before entering definitely upon the vexed question of the Chinese or steppe-land priority of the Animal Style in question, let us survey the types of artifacts that reveal the historical connection between the two cultural areas. Even if in the present article we limit the investigation to weapons, celts and horse's forehead ornaments (as above), they prove to be far more numerous than appears from the materials published so far. It should be observed that in citing Nomad Art counterparts to the purely Chinese artifacts we can only to a very limited extent make use of the »Ordos» or »Sino-Siberian» publications of J. G. Andersson, Salmony, Griessmaier and others.³⁾ we do not know the provenience of the majority of the »Animal-Style» specimens there illustrated; they were bought in Peking or Shanghai, and, though they undoubtedly exhibit the »Nomad Animal style», we cannot know whether they were really made in the steppe region or cast in China, for export to the North or even made in China for Chinese use. We must confine our documentation to such specimens as are demonstrably known to hail from Ordos, Suei-yüan, Mongolia, Siberia. On the other hand, Northern parallels here adduced are, for reasons stated above, in themselves undated and undatable. It may be that a Suei-yüan knife here cited as a counterpart to an An-yang knife was in fact cast in late Chou time or even Han time, though it belongs to a class that must have existed

¹⁾ I. e. An-yang period acc. to the orthodox chronology, see above.

²⁾ G. Ecke, Über einige Messer aus An-yang; in Chung Tê hüe chi, Sinologische Arbeiten, 1943.

³⁾ J. G. Andersson, Hunting Magic in the Animal Style, BMFEA 4; Selected Ordos Bronzes, ibid. 5; A. Salmony, Sino-Siberian Art, 1933; W. Griessmaier, Sammlung Baron Eduard von der Heydt, 1938.

in An-yang time. What we compare are the types, not the individual specimens.

In the following paragraphs, our head-lines »Class II» etc. refer to the classes of Chinese specimens described in the beginning of this paper.

Class II.

Socketed celts. As to the shape, there are many practically identical Nomad counterparts to the Chinese celts with square section, both the short and broad type and the long and narrow type. For examples see T. J. Arne, *Die Funde von Luan P'ing und Hsuan Hua* (BMFEA 5), pls. II, IX; Egami and Mizuno, *Inner Mongolia and the region of the Great Wall II*, pl. 1 (Suei-yüan); G. Merhart, *Bronzezeit am Jenissei*, pp. 49, 55, 57 (Krasnoyarsk types).

Class III.

The square axes of this type (specimens 28—34) should be compared with the axes 191, 192, 193 (in our pl. 34) from Minussinsk (Martin, *L'âge du bronze au musée de Minoussinsk*, pl. 7). It might seem to be an obstacle to the combination of the two types that the Siberian axes are quite thick at the base, only thinning out towards the edge, being closely cognate to such sturdy axes as 194 (Merhart pl. III) and 195 (Radloff, *Sibirskiya drevnosti*, pl. 17), whereas some of the Chinese axes have a homogeneously thin blade (see spec. 32). But some of the Chinese specimens, after all, have a blade that is likewise thicker at the base, thinning out towards the edge (see 33), and this is obviously, on the Chinese side, the primary type, the homogeneously thin blade (less strong and practical) being an evolution and a degeneration on Chinese soil. In fact the similarity between the Siberian and the Chinese types is striking. Even the size — remarkably small axes — is approximately the same, the Chinese specimens varying from 11.7 cm. to 15 cm., the Siberian from 13.1 cm. to 15.4 cm. The raised parallel lines are the same. The two groups certainly have some affinity. To the same class belongs 196 from Kuei-hua ch'eng (Suei-yüan), MFEA (K. 11090: 42), L. 14.5 cm., but this is an obviously later type, with the blade elegantly widening towards the edge.

Class VI.

More than once an historical connection has been proposed between the Chinese shaft-hole axe of class VI (61—83) and the well-known Siberian pick-axes, e. g. 197, 198, 199 (Martin, pl. 8), 200 (Radloff, pl. 16).¹⁾ They were already combined by H. Shetelig in 1917²⁾, and M. Loehr (O. Z. 1936, p. 11, note) writes: »Durch das Vorkommen bestimmter Waffentypen (ösenlose Tüllenbeile, Schaftringäxte,

¹⁾ On the other hand, Flinders Petrie (*Tools and Weapons* 1917, p. 13) would derive the Chinese cl. VI from the Siberian axes of type 194, 195, which is certainly quite impossible.

²⁾ H. Shetelig, *Vaabøn og Redsakær fra Kinas Bronzealder*, in *Westlandske Kunstdistriktsmuseums Aarbok* 1917.

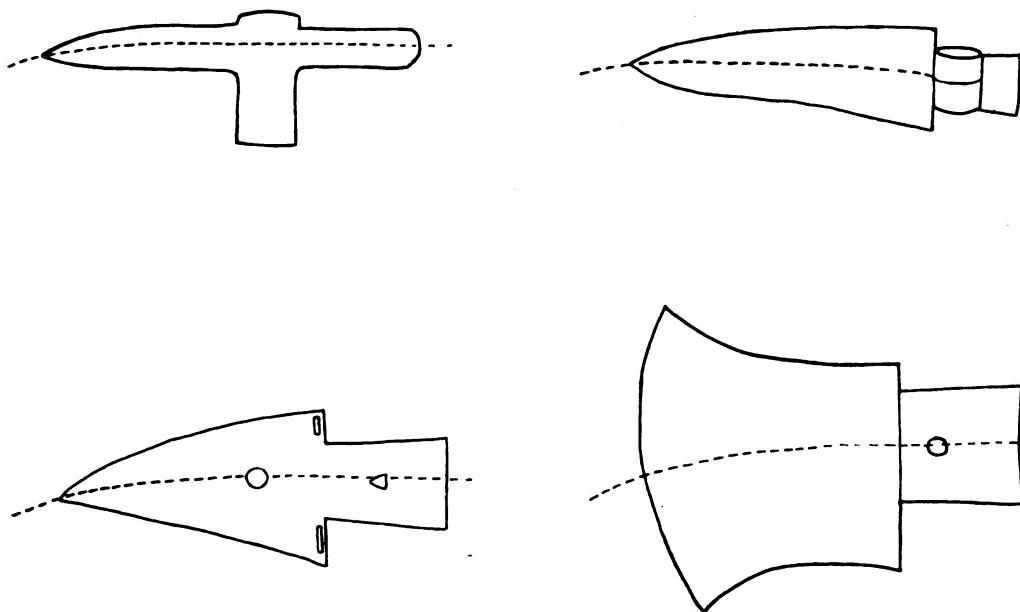


Fig. 1.

Lanzenspitzen sibirischen Typs) ist die Verbindung Sibirien-China erwiesen; China, als empfangender Teil, wird vermutlich mit geringer Verspätung gegenüber Sibirien in die Bronzeseit eingetreten sein.¹⁾

There are certain features that make it tempting to assume an historical connection. One is the grooves on the tang in the Siberian type (200), which recall the striped tang on spec. 64, 65 in cl. VI. For a striping of the tang very similar to that of the Chinese tang see the pick-axe in Aspelin, Antiquités du nord finno-ougrien, p. 58, fig. 221. This is suggestive, but of course not conclusive. Another phenomenon might seem more serious: the bent axis of the weapons in both cultures. But this, after all, really proves nothing, for that is a *finesse* in axes in many cultures all over the world (e. g. the »boat-axes» of Scandinavia), based on the practical realization that it is an advantage if the axe bends slightly in accordance with the curve described by the striking hand. This is in fact the basic principle in our Chinese asymmetrical axes of classes IV and V: the »centre of gravity» of the weapon is slightly displaced downwards (in the direction of the shaft), so as to secure a better and more »organic» blow and less strain to the shaft (fig. 1 above).

This principle is carried to extremes, for instance, in the axes of the Luristan

¹⁾ As to the »spear-heads», it should be pointed out that spear-heads play a very modest part in the Nomad culture. A few specimens are illustrated by Martin and a few by Tallgren (Coll. Tovostine), and some by Radloff (pls. 18, 19) but they show no definite affinity with the An-yang types (class I above).

culture¹). Its appearance both in the Siberian pick-axes and in the Yin dagger-axes is the result of identical practical considerations and can in no way prove any historical connection.

The question, however, is sufficiently serious to deserve a more detailed discussion. The mere fact that both the Siberian pick-axe (type 197—200) and the Chinese dagger-axe of class VI (type 61) have a long and narrow, «dagger-like» blade affixed at right angles to a shaft is certainly not sufficient to prove any historical derivation of the one from the other. And the differences in type are more striking than the similarities; they are in fact fundamentally different. The Chinese axe has a uniformly thin blade; this blade is always triangular, considerably broader at the base; and it never has a shaft-tube, always a simple shaft-hole. The Siberian axe is generally thicker-bladed at the base (in the vicinity of the shaft-tube), often preserving a considerable thickness along a major part of the blade and only thinning out as it approaches the point; it is thus more or less cognate to the real, sturdy pick, such as we find for instance in 201, 202, 203 (Martin, pl. 8) (the pick type exists also in Ordos, cf. Andersson, BMFEA 5, p. 10); it is uniformly narrow along its whole length, not triangular; and it has always a well developed shaft-tube.

If we suppose a derivation of the one type from the other, we are confronted with great difficulties whichever way we turn.

If we assume that the Siberian type is primary and the Chinese derived from it, there is first the difficulty of the shafting construction. The Siberian shaft-tube is obviously a more advanced stage than the simple shaft-hole of the Chinese axe, and we should have to conclude that the Chinese artisans were unable to imitate it and replaced it by a more primitive contrivance, which would be very far-fetched, in view of the extreme skill of the Chinese bronze masters. Secondly, we could not account for the fact that the An-yang material does not contain a single specimen with the uniformly narrow blade of the Siberian type: there is always the triangular blade, broader at the base, forming «wings» on both sides of the shaft-hole; plainly, the Chinese blade is not, in its shape, an imitation of the Siberian blade. Thirdly, the uniform thinness of the Chinese blade differs greatly from the thickness of the Siberian blade at the base; assuming a loan, we should at least have some transitory examples of a blade thicker at the base (the real pick does not exist in the An-yang material, so far as I am aware). The only way out of all these difficulties would be to postulate an earlier, as yet unknown Chinese pre-An-yang stage with dagger-axes more similar to the Siberian type, from which the An-yang class VI would then have gradually evolved. But then, in the first place, we are out in the field of pure conjecture, in the second place it would move the Siberian prototypes very far back into hoary antiquity, which we cannot reasonably admit.

If, on the other hand, we were to suppose that the Siberian type is an imitation

¹) Godard, *Les Bronzes de Luristan*, 1931.

of the Chinese dagger-axe of class VI, this would have the advantage of accounting for the more advanced shafting contrivance, the shaft-tube: this might have developed on Siberian soil, as an improvement of the more primitive Chinese shaft-hole. But then, again, we could not account for the fact that the Siberian material has no examples of triangular blades similar to the Chinese; nor for the fact that there are no Siberian axes with the uniformly thin blade of the Chinese type. And we should have to say that the close similarity of the Siberian axe to the thick Siberian pick is the result of a convergence: the dagger-axe borrowed from the Chinese was made thicker at the base of the blade under the influence of the independently existing thick pick — an exceedingly far-fetched and improbable explanation. All these considerations can lead to but one conclusion. The Chinese axe of class VI (type 61) is not derived from the Siberian type 197—200, nor the latter from the former. They are fundamentally and genetically different types of weapon, in spite of their superficial similarity, and they cannot prove any historical connection between the Siberian and the Chinese culture.

Quite different is the case of some specimens illustrated in pl. 35. The first, 204, is an axe found in the Ordos desert (MFEA, K. 11211: 19, L. 17 cm.) and which is clearly cognate to our class VI. It lacks the bend of the axis and the »wings» of the blade of the Chinese axe, but is so similar otherwise that it must be derived from the Chinese weapon; if I assume that it is not *vice versa*, it is because it is extremely rare in the steppe culture, where it cannot be said to represent a normal type. A further elaboration of the same loan idea is the weapon 205, found in Suei-yüan (MFEA, K. 11278: 10, L. 19 cm.), in which the shaft-hole has been prolonged into a shaft-tube. From the Siberian (Yenissei) province I know of no direct counterparts to these Ordos-Suei-yüan axes, which are undoubtedly due to direct Chinese influence.

Class X.

A comparison of Chinese Yin-time knives with the knives of the Nomad culture is very difficult for an obvious reason. The treasure-hunters who have looted the An-yang graves have taken little interest in the ordinary, simple, everyday knives which have no value as *ku-tung* »curios». Hence only the big and more spectacular ritual knives have come on the market, the simpler artifacts that are bound to have come to light have been thrown away as valueless. If a simple knife such as 147 has been preserved, it was because Karlbeck happened to get it directly in Siao-t'un. But even this single instance is valuable, for it agrees in a most striking way with the knife 206 (Inner Mongolia, pl. VI) found in Suei-yüan. It is a good example of the »outward-curving knife» of the Nomad style, frequent in the steppe finds (Andersson, BMFEA 4, pl II; Martin, pl. 12: 10). A good example (though with ring-head) is 207 (MFEA, K. 11003: 106), found in the Ordos desert. On the other hand, the simple knife 146, excavated by the Academia Sinica, curving only very slightly outwards, has its exact counterpart in the Minussinsk

knife 208 (Aspelin p. 57). Of the far more common «inward-curving knife» of the Nomad art there are many Chinese examples in class XI below, but I happen to have no An-yang specimens without the ring-head, though they undoubtedly exist. The standard Chinese knife of shape 149—150 has no counterpart in the Nomad art.

Class XI.

It should be observed that not all types of An-yang ring-head knives have parallels in the Nomad culture. The types (whether straight, with S-curved back or inward-curving) which have a broad blade, with back and edge approximately parallel along most of the blade, turning outwards abruptly into the point, i. e. types 155 a, 156, 157, 161, are purely Chinese in shape, and apart from the ring-head they have no relation to the Nomad knives. The other types, on the contrary, are closely congruent with well-known Siberian and Ordos-Mongolian classes. For the class with S-curved back (158—160), cf. 209 (MFEA, K. 11003: 28), Ordos; 210 (MFEA, K. 11003: 47), Ordos; 211 (Radloff, pl. IV), Minussinsk; 212 (Radloff pl. V), Minussinsk. For the Chinese inward-curving class (165—171) there are any number of parallels, so well-known that it is not necessary to reproduce any specimens here: Andersson, BMFEA 4, pl. II: 2, Ordos; Inner Mongolia, pl. IV, V, Suei-yüan; Martin, pls. 11, 13 and *passim*, Minussinsk; Radloff, pl. II: 2, 3, pl. IV: 18 etc., all Minussinsk. From Ordos and Suei-yüan the MFEA possesses dozens of specimens of this class. There is, however, one type that deserves special mention: that with three studs on the ring (class XI: fig. 171, 172). We have some most striking Nomad art counterparts, and this is very important, since it is such a peculiar and characteristic feature: 213 (Martin, pl. 11: 6), 214 (Martin, pl. 13: 5), 215 (Radloff, pl. IV: 19), all Minussinsk.

Class XII.

The jingle-head knife (173) is a typical Nomad art feature. Cf. 216 (MFEA, K. 11152: 1) Mongolia; 217 (MFEA, K. 11287: 3), Mongolia; 218 (Martin, pl. 12), Minussinsk; 219 (Radloff, pl. VI), Krasnoyarsk. For two daggers with similar jingle heads from the Kara-Suk culture, see Artibus Asiae III, p. 194 (Grijsnoff). The one reproduced here, 220, is particularly interesting since the shape of the jingle and the loop at its base are exactly the same as on the An-yang knife 173.

Classes XIII—XIV.

Knives and daggers with animal's heads. There are striking parallels in the Nomad Animal style: 221 (MFEA, K. 12059), L. 24 cm., Ordos type (bought in Ta-t'ung); 222 (MFEA, K. 11246: 1), L. 10 cm, Mongolia; 223 (MFEA, K. 11225: 11), L. 19 cm., Ordos; 224 (MFEA, K. 11282: 40), L. 19.6 cm., Ordos desert; 225 (MFEA, K. 11003: 103), L. 13 cm., Ordos desert; 226 (MFEA, K. 11290: 120), Kuei-hua-ch'eng; 227 (MFEA, K. 11276: 39), L. 30.7 cm., Hattim-sum, Chahar; 228 (Martin,

pl. 14), L. 17.5 cm., Minussinsk; 229 (Martin, pl. 11), L. 25.5 cm., Minussinsk; 230 (Tallgren, Tovostine pl. IV), Minussinsk; 231 (*ibid.*), Minussinsk; 232 (*ibid.* p. 45), Siberia; 233, 234 (*Artibus Asiae* III, p. 196), both of the Siberian Kara-Suk culture; 235 (*ibid.* p. 193), region of Koto-köl, Eastern Siberia (contemporary with Kara-Suk); 236 (ESA 12, p. 125), Siberia; 237 (*ibid.*), Minussinsk.

From the Scythian province analogous types are not known from the earliest period, but only from \pm 500 B. C. Such specimens are 238, 239, 240 (Ebert, Reallexikon 13, pl. 39 A), bridle cheek-pieces (»psalia») in bone, and 241 (*ibid.* pl. 39 B) in bronze, all from the Shumeiko kurgan, Poltava region (dated at the end of the VIth c. by Rostovzhev, Skythien und Bosporus p. 449, and by Schefold, Esa III, p. 25); 242 (Borovka, pl. 33 B), bone psalion, same region and period; 243 (Borovka pl. 33 C), Zhurovka, Dnepr region (Kiev district), circa 500 B. C.; a kindred piece, though with a bird's head, is 244 (Borovka, pl. 10 C), Zhurovka (kurgan 402, dated in 460—450 by Schefold, op. cit. p. 24).

Class XV.

Moon-shaped frontlets. For Nomad-style counterparts, on knives and daggers, to the animal's head terminals and jingle terminals on 184, 185 and 186, see classes XIII—XIV and XII above. To the simplified specimen 187 there correspond quite remarkably closely 245, 246, 247 (Martin, pl. 24) Minussinsk, and a similar object in Tallgren, Tovostine pl. VI. As early as in 1917 Tallgren proposed to interpret these Siberian objects as derives from our Chinese class XV, and there cannot be the slightest doubt that he is right: the Siberian type represents a simplified and degenerate stage of this type.

* * *

In the parallels between An-yang and the Nomad culture here surveyed, we may distinguish three categories:

1) In the first place there are certain simple types: socketed celts (II) and simple, outward-curving knives (X) which are sufficiently simple and commonplace to lack conclusive value in themselves; it is only in combination with the rest that they acquire real importance. It cannot be claimed that the Chinese specimens are typologically primary and the Nomad ones secondary, nor *vice versa*.

2) In the second place there is a whole series of exceedingly characteristic and peculiar types that indubitably reveal a real historical relationship: animal-head knives and daggers (XIII—XIV), ring-head knives (XI), jingle-head knife (XII), square striped axes (III). Here again, the types are so identical or at least so akin that it would be to force the evidence of the materials if we were to state that the Chinese specimens are typologically primary to the Nomad specimens or *vice versa*. It might be tempting to say that the very style of the animal-head representations of An-yang, which tallies well with the character of the Nomad Animal style as excellently summed up by Tallgren (*Acta Archaeologica* 1933, p. 259):

»Ein frischer Naturalismus mit einer starken Stilisierung, die sogar konventionell ist, gepaart», argues in favour of a northern origin: this »fresh naturalism» may be expected to belong primarily to the nomad peoples, professional hunters who had an intimate knowledge of the fauna they depicted. The »city culture» of An-yang would be less prone to such a »fresh naturalism». But that would be a false conclusion. From the oracle bone inscriptions and from finds in An-yang we know that the An-yang people were great hunters and that they had access, in the very vicinity of the capital, to an exceedingly rich and varied fauna, comprising *inter alia* wild horse, various kinds of Cervidae, bears of several kinds, badger, tiger, fox, panther, hare, boar, goat, elephant, rhinoceros, monkey. Moreover, the Yin people had domesticated horses. We may therefore expect a »fresh naturalism» resulting from the conditions in the An-yang culture just as well as from that of the nomads. No conclusion as to the priority of the artistic types can be drawn from such considerations.

3) In the third place there are two elements that reveal a Chinese origin. The shaft-hole dagger-axe, which sporadically crops up in the easternmost province of the steppe culture (types 204, 205); and the horse's frontlet, which in Siberia has a degenerate form, unintelligible without reference to the Chinese prototype.

This third category may be very suggestive and interesting in itself, but it is certainly far too limited to allow us to conclude, by analogy, that in all three categories it is China that is the giver and the steppe art that is the taker. We must concentrate upon the second category: the knives, daggers and axes common to both cultures.

It is certainly not correct to say, with Ecke, that the animal-head knives in An-yang are so few that they must be regarded as imported goods; the total An-yang finds are so limited, at this stage of our knowledge, that no statistics are possible. Still less is it advisable simply to state as a fact, as Ecke does, that the ring-head knives are Siberian types introduced into China. That is to answer in advance without any scrutiny the question which it is precisely our task to investigate.

There is one fact that at first sight makes it very tempting to assume that certain An-yang artifacts of the second category, namely the animal-head knives and daggers (XIII—XIV), are either directly imported specimens (acquired by trade or as booty in war), or Chinese imitations of northern models: the fact that this kind of animal-style heads never, or hardly ever, occur in the regular An-yang art as known from ritual bronzes. There are hundreds of vessels either found in An-yang or bearing Yin-time inscriptions or stylistically belonging to the epoch of the Yin art (styles A and B, see Karlgren BMFEA 9), which have plastic animal's heads, particularly at the points of attachment of the handle, but also protruding from the décor zones round the neck and the foot of the vessel. It is especially common on the Kuei bowls and the Yu flasks. There is a rich variety in this »fauna» and its stylistic expression, but its character must be said, on the whole, to be fundamentally different from that of the Nomad Animal style (a certain,

superficial affinity might in some cases be argued — animal's heads are necessarily animal's heads — but fundamentally the style is very different indeed). This contrast between the animal style of the Chinese ritual vessels and that of the nomads is so strong that, when in some isolated case this rule is broken through, e. g. in the Yu in our fig. 248 (Jung Keng: Shang Chou yi k'i t'ung k'ao, fig. 670), a vessel from early Chou time, according to its inscription, which has a clear and indisputable Nomad style both in the plastic heads (Argali sheep?) and in the décor, one is struck by the singularly »un-Chinese» character of the specimen. What would be more natural, then, than to conclude that the knives of classes XIII—XIV, with their Nomad-art heads, are imported or imitations of northern types?

Nevertheless this conclusion is not permissible.

In the first place, we can prove that the Chinese bronze masters themselves could and did produce animal's heads of the northern style. We have them brilliantly executed in our class XV (specimens 184, 185), the frontlets which have the Nomad-style heads combined with a purely Chinese décor on the beams: these specimens were undoubtedly made by Chinese artisans. Thus the casting of animal-head knives was certainly not beyond the skill of the Chinese masters. In the second place, and above all, we have strong reasons to affirm that we cannot draw any conclusions from the absence of Nomad-style animals on the ritual bronze vessels. Later periods in the Chinese bronze art prove definitely that there was a marked contrast in style between the sacred, ritual art and the lay art. We can observe this most clearly in the Huai style. On the ritual vessels of that period (roughly 650—220 B. C) there are dragons of many kinds (interlaced or placed antithetically), birds, tigers and other quadrupeds. On the other hand, the mirrors of the same period likewise have a rich fauna: dragons of various shapes, birds, quadrupeds (see Karlgren, BMFEA 13, 1941). But there is a whole world of difference between the »hieratic» fauna and the lay fauna in the Huai style. Yet specimens of the two contrasting kinds were unearthed together in the same find places of the same period, e. g. Kin-ts'un in Honan and Shou-chou in Anhuei. I have fully discussed this striking contrast between the sacred and the lay art *op. cit.* p. 73. There is no reason why the same rule should not apply to the art of the Yin. It would be quite in accord with the ancient Chinese ideas that in An-yang there were produced, side by side, sacred vessels in the ritual art style (or rather styles, A and B) and lay art specimens like the knives and daggers of types XIII—XIV (with animal's heads resembling those of the Nomad art), all executed by the same bronze masters. Thus the ritual vessels can never prove that the animal-head knives were not genuinely indigenous Chinese types.

Are we then at a loss to decide whether China (An-yang) or Siberia (or Mongolia) was the primary source of this particular »animal style», which in China was a lay art as opposed to the hieratic art? Perhaps not; in point of fact we may push our inquiry one important step further. This necessitates a lengthy discussion of certain Chinese axe types.

There is one fundamentally important phenomenon that has long been overlooked, but which has a bearing on our problem: the weapons in classes VI, VII, VIII and IX (61—145) exist exclusively as axes (shafted), never as real daggers (without shaft). On all of them there are clear indications that they have been shafted. They have either shaft-holes or lugs or slits in the base of the blade or an attachment hole in the tang. In an exceptional case like 118, where there is nothing of all this, there are strong vestiges of the wooden shaft on the tang; and on a great many specimens among the rest there are likewise clearly discernible traces of the shaft. In short, in all the material known so far there are no real daggers, the weapons are all axes. What does this striking fact signify?



Fig. 2.

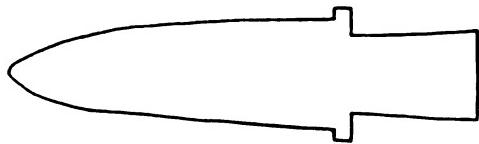


Fig. 3.

Let us first concentrate upon classes VI and VII, the shaft-hole axes, fig. 2, and the axes without shaft-hole but with lugs and a symmetrically placed tang: fig. 3. These types have hitherto mostly been called »dagger-axes» in the Western literature; and that is true as a description, insofar that they have a blade that resembles a dagger (a long, comparatively narrow, double-edged blade), attached to a shaft and constituting an axe. But it is not true genetically, in the sense that a primarily existing dagger (unshafted) has secondarily been provided with a shaft, turning it into an axe; this, at any rate, has not been proved so far, since there are no specimens of such primary, shaftless daggers. And in fact, the very form of types VI and VII strongly militates against the idea that it was originally a dagger. The tang is much too short; it cannot represent an original handle, for it could not be grasped in the hand. We should have to postulate that the primary dagger — as yet unknown — had a much longer handle, now abbreviated into the short tang. But that is extremely unlikely, for there would then most certainly exist some specimens at least which preserved a longer tang, as a reminiscence of the original handle. Moreover, it is equally improbable that the original dagger should have died out so entirely that no specimen is known, whereas the weapon would survive in the form of an axe. Briefly, types VI and VII were never daggers, they are primarily axes; this in spite of the fact that they have an elongated »dagger-like» blade.

It is impossible, on the basis of the An-yang materials alone, to answer the question, whether these elongated axe types were derived from broader types, namely the broader, triangular axes of Class V (spec. 58—60), fig. 4, by a gradual narrowing of the blade, or whether the latter, on the contrary, are a modification

of the former, by a gradual broadening of the base of the blade; or, as a third alternative, whether classes VI, VII on the one hand and class V on the other represent quite independent types. Purely typological speculations based on shapes that coexist in An-yang are really futile; we need knowledge of some pre-An-yang material (cf. below) before we can decide the question. The broad axes of class V are comparatively rare in the An-yang material; they exist exclusively without shaft-hole. There is an axe, fig. 249 (MFEA, K. 11090: 39, L. 18 cm.), which was found in Shih-kia-chuang in southern Hopei (no great distance from An-yang); its age cannot be determined, but possibly it may represent a Yin-time shaft-holed counterpart to the axes of class V. The rarity of this class might be interpreted in two ways: either it is a dying-out remnant of the prototype from which classes VI and VII have developed; or it indicates that this broad type V was an innovation in its initial stage. As already stated, we cannot draw any conclusions from An-yang materials alone.

There is, however, in the MFEA, a very interesting specimen, often discussed, in which J. G. Andersson has seen the stone age prototype of the »dagger-axe» of Yin: fig. 250 (MFEA, K. 11214, L. 11. 3 cm.). It is a stray find, from Lung-kuan hien in Hopei, and nothing definite, of course, can be known of its age. H. G. Creel¹⁾, following a suggestion of C. W. Bishop, believes that the specimen is »a stone reproduction of a metal form». That is a mere guess, and not a very likely one at that. We know from Western cultures many examples of the phenomenon that bronze weapon types were reproduced in stone. But when such imitations are deduced, it is because the true prototype is well-known, and the investigator can show the model after which the stone artifact has been made. No such conditions obtain here. Bishop and Creel cannot show a single bronze instance which could form the pattern of this stone axe and so their conclusion hangs entirely in the air. I am convinced that Andersson is right. The stone specimen gives a very happy illustration of how the primitive weapon has developed: the base of the blade had too little breadth to affix the shaft securely; therefore shortly in front of the line of the base where the shaft should be attached the blade turns abruptly outwards at right angles, forming a base back (still with the same thickness) which is about a third longer than the breadth of the rest of the blade; behind this a section of the same breadth continues, but of only half the thickness of the blade, for insertion in the wooden shaft. We have here the nucleus, the primitive beginnings of the parts of axe VII (fig. 5): a = the blade; b = the lugs; c = the tang.

The stone type and the bronze type are not so identical that the former can be said (with Bishop) to be a copy of the latter. On the contrary, the stone specimen

¹⁾ *Monumenta Serica* 1935, p. 49, note.

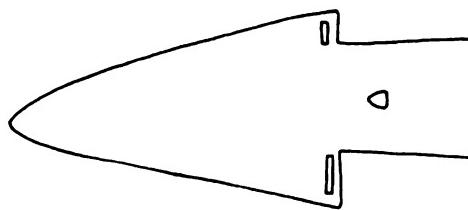


Fig. 4.

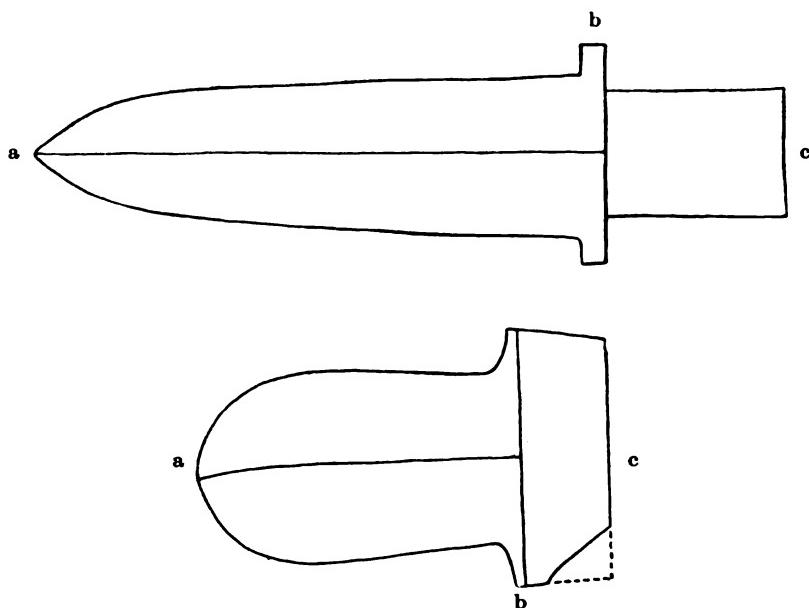


Fig. 5.

is more primitive in construction than the bronze axe, it is the prototype from which the latter has evolved as a modification and an improvement.

The very fact that this stone specimen gives the clue to the birth of the lugs of class VII confirms that Andersson is fundamentally right. Thus it teaches us four important things:

In the first place, it shows that the Chinese axes of classes VI and VII are really autochthonous, descendants of a Stone-Age type, not derived from any Siberian type, which confirms our conclusions above in that respect.

In the second place, the Stone-Age specimen shows that type VII, with no shaft-hole but lugs, is older than type VI, with shaft-hole but no lugs: the application of a shaft-hole is an improvement on the more primitive lugs as fastening contrivance, the lug axe VII standing more close to the stone Age prototype than VI. (This opinion was already expressed by H. Shetelig in 1917). Once the shaft-hole was introduced, there was no longer any need for lugs, and the latter were discarded.

In the third place, the stone prototype shows us that the lugs have grown out organically, as the result of a practical need. This is important, for if after all we were to assume — against what was said above — that a primitive dagger (as yet unknown to us) was the prototype of axe VII, it would be tempting to conclude that the lugs of this class were a reminiscence of a dagger guard (fig. 6).

That this was not really so is indeed proved by two facts (besides the Stone-Age axe which shows how the lugs originated). On the one hand, the shaft-hole axes of class VI have no lugs: if they were descendants of daggers with guards, they



Fig. 6.

should have lugs, as reminiscences of the dagger guard, just as well as class VII.¹⁾ On the other hand, the ritual »jade» axes in class VII, which served no practical purpose and needed no strength in the

fastening, have no lugs, merely an attachment hole. This emphasizes the fact that the lugs originated in the practical need for secure fastening.

In the fourth place, the Stone-Age specimen with a blade that is nearly twice as long as it is broad suggests that the axe types VI and VII, with their elongated blade, do not derive from the broader axe in class V, but are primarily elongated.

Let us sum up our conclusions about classes VI and VII. They are autochthonous types. They do not derive from daggers, they are primarily axes and derive directly from a Chinese Stone-Age prototype. Class VII, with lugs (which are all from the beginning fastening contrivances, not derived from any kind of dagger guard) is the older type; class VI, in which the lugs have been replaced by a shaft-hole, is a more highly evolved type. The long, comparatively narrow (»dagger-like») blade of both classes is original, it has not developed from a broad-bladed type.

From these classes we pass on to the other classes of pointed axes. Leaving aside, for the moment, class VIII (to which we shall revert later), we next concentrate on class IX, the axe with a longer, bent tang (Fig. 7).

Just like the preceding, this weapon occurs exclusively as a shafted axe, never as an independent, primary dagger. But if it was natural that classes VI and VII should not have appeared as daggers but only as axes (having a tang too short to represent a handle), the absence of any hand-weapon type forming the basis of our class IX is much more astonishing: here we have a long and beautifully shaped tang that really gives a clear impression of being a handle. The axe is »dagger-like» insofar that it is double-edged. But in spite of this it is not a dagger that the shape of our axe recalls to mind and causes us to expect for a prototype, but a knife. The upper margin of the tang forms a continuous line with the upper edge of the blade, and this upper edge quite strongly evinces the idea of a knife back. Why do we not find, in the Anyang material, the independent knife which is the prototype of the axe IX?

The answer is simple: we do find it, but we find it where we did not expect it: in the knives in Nomad Animal style of class XIII!

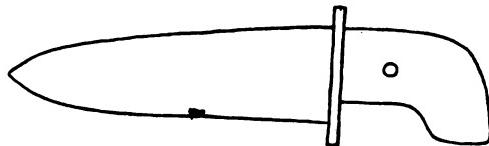


Fig. 7.

¹⁾ To say that class VII derives from daggers with guards and class VI from daggers without guards would be very far-fetched: the difference between VII and VI is uniquely a difference in the shaft-fastening contrivance: lugs or shaft-hole respectively.

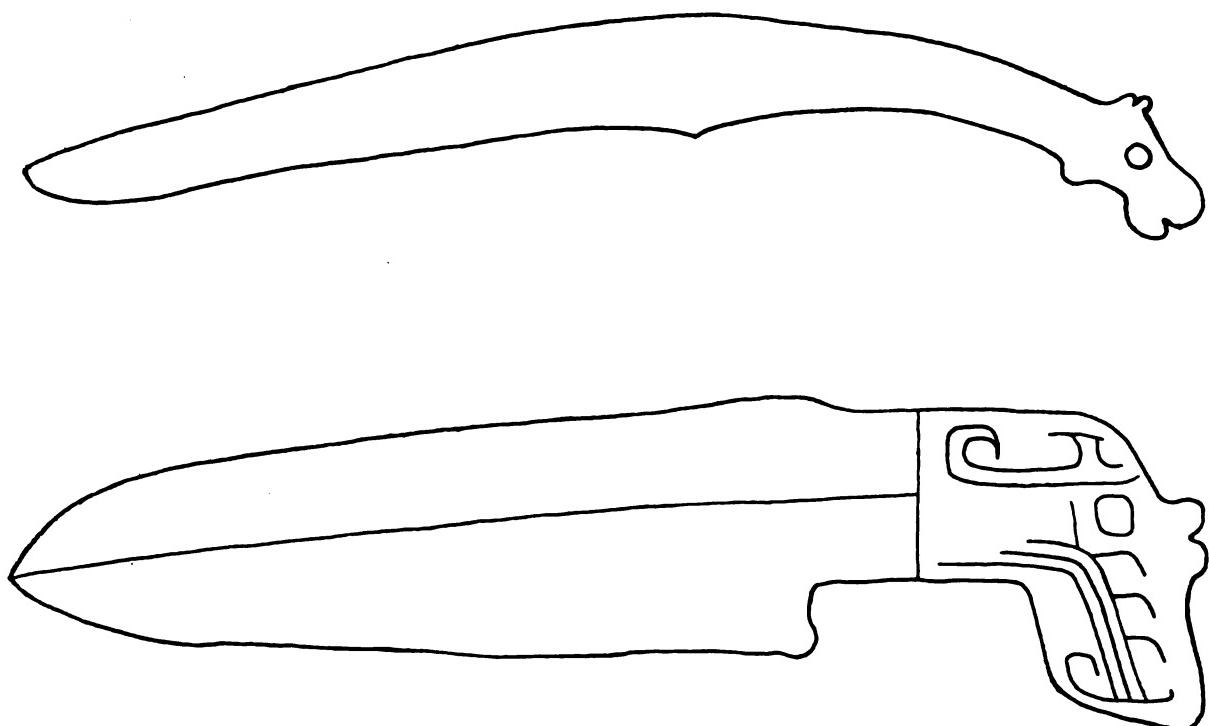


Fig. 8.

If we place the knife 175 (class XIII) and the axe 118 (class IX) side by side we realize immediately that they are fundamentally the same (fig. 8).

But whereas the knife 175 is a natural, logical product: a plastic head as terminal of the handle, a beautiful, continuous line from the handle along the back of the knife, the axe 118 is illogical and unnatural: the handle head is no longer plastic but a clumsily and coarsely cut contour in the flat, with the details of the animal's head filled in with a drawing in thin raised lines; the upper margin of the blade, which logically ought to be the (blunt) back of a knife, has been turned into a second edge, the result being an abnormally asymmetrical dagger-axe. In short, the axe 118 is a translation and simultaneously a corruption of the knife 175.

Now the axes of class IX are to a large extent thin, sometimes very thin, and in these cases they evidently served merely ritual purposes, a fact pointed out long ago.¹⁾ For a ritual weapon, probably carried in procession, an ordinary knife, held in the hand, was not suitable. It was turned into an axe and provided with a long shaft, so that it could be raised high in the ceremonial procession. The interpretation of class IX which thus suggests itself is that the practical lay knife of class XIII (type 175) was transformed into a ritual weapon (type 118), and in

¹⁾ For instance by Karlbeck, BMFEA 2, p. 198.

this translation it was considerably modified. Since it was altered from a knife into an axe, it took over some of the principal characteristics of the already existing axes of class VII: the traditional double edges, and, in the majority of cases, the lugs for fastening (in some instances, e. g. 144, one preferred the shaft-hole of class VI). But there remained, as distinguishing it from the model in class VII, two important characteristics of the lay knife of which it was a translation: the long, curved tang that formed an animal's head, and the violent asymmetry, with the tang applied so that its upper margin formed that continuous line with the upper margin of the blade (originally a knife back, now changed into a second edge) which is so characteristic of all the «inward-curving knives».

In our type 118, the animal's head is still clearly that of a quadruped, quite closely related to the prototype 175, in spite of the fact that the animal has some kind of »crest» on the top of the head (so familiar in the ritual animal representations); still more clearly is this seen in specimen 189 (from Lo-yang), which even lacks the crest. But in the following axes 119—125 the evolution has carried us further away from the prototype 118. True, thanks to the open-work they are somewhat more strongly reminiscent of the plastic treatment of the head in 175 than even 118; but for the rest they are less similar. They have developed in a direction very typical of the ritual art: the quadruped's head of 175 and 118 is transformed into a bird-like head (dragon's head) with the large, hooked beak that is so familiar from unnumerable ritual vessels; and we should compare particularly our axes 41 and 42, where we have a similar head, on 41 belonging to a bird, on 42 to a dragon. And this terminal head has sometimes been simplified and reduced in the extreme, as in 127 (a simple grave-gift axe).

In the transformation from a lay knife to a ritual axe, types 118 and 119—125 represent only a first and a second stage, in which the tang is still clearly an animal's head, closely related to the handle in the prototype 175. But once the axe had been, so to speak, dissociated from its original, the knife, some further and much more violent modifications gradually took place: of the original head of the tang (ex-handle) there was preserved only the general outline (fig. 7): and the flat surface of the tang was filled with figures of the purely ritual style; above all dragons, turning the head towards the blade, first very clearly drawn, e. g. 133, 135, then gradually becoming more and more corrupted, e. g. 141, and finally almost entirely dissolved (142). The fact that class IX shows such a long line of evolution from its prototype, the »animal style» knife of type 175, is of the greatest importance, as we shall see presently.

Once we have discovered the clue to the origin and development of class IX, the explanation of class VIII (fig. 9) is easily found. It may be briefly described as identical with the venerable class VII (the oldest of all the classes, standing nearest to the Stone-Age prototype) but for one important modification: an extreme asymmetry. A certain tendency towards asymmetry is universal in the An-yang axes of various types, as discussed on p. 125 above. But whereas in class VI it is very



Fig. 9.

slight, and in class IV, though sometimes strongly pronounced, it never goes so far as to place the upper margin of the tang in a line with the upper edge of the blade, here, in class VIII, it is extreme. It is easily seen that here the upper margin of the tang forms a continuous line with the

upper edge of the blade, the shape in this respect being exactly the same as in class IX above. We may express it simply thus: class VIII, fig. 9, is class VII, fig. 3, modified by the influence of class IX, fig. 7; in other words, the continuous upper line in IX, fig. 7, there natural and due to the knife-origin of the axe, has been transferred to axes of type VII, fig. 3, with their centrally placed tang, and this has caused them to become VIII, fig. 9, just as asymmetrical as class IX, fig. 7.



Fig. 3.



Fig. 7.

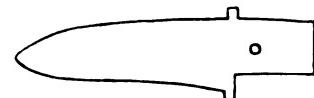


Fig. 9.

A contributive influence in this direction may have been exercised by another group. The simple, inward-curving knife of type fig. 10 which is so exceedingly common in the Nomad culture, e. g. 251 (MFEA, K. 11003: 71), Ordos, 252 (Martin, pl. 16: 5), 253 (Merhart pl. X), Minussinsk, 254 (MFEA, K. 10036: 6), Ordos, is represented in An-yang in the ring-head variety, type 169. This type has exactly the same continuous line formed by the upper margin of handle and back, and the existence of this type has probably facilitated the modification of type VII, fig. 3, into type VIII, fig. 9, chiefly due to the influence of type IX, fig. 7.

We may sum up our conclusions regarding the evolution of our principal types of »dagger-axes» by the following diagram (fig. 11 on p. 139).

Our typological deductions above have an important bearing on the problem of the origin of the »inward-curving» animal-head knife common in An-yang as well as in the Nomad culture, and the question of the priority of the one or the other of these cultural areas as producer of this type of knife. It is obvious, from all the arguments that have been developed above, that the animal-head knife cannot possibly have made its appearance in An-yang at the end of the An-yang era (1300—1028 B. C.). It is the prototype which constitutes the point of departure of a very long and elaborate evolution. It has first given rise, by a »translation» into ritual style, to type 118 (class IX), and as a further step in the development, to type 119—125, which in its turn, by a lengthy process of deterioration and simplification, has resulted in type 127. Moreover, type 118 has by a sweeping trans-

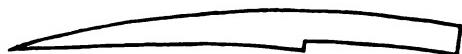


Fig. 10.

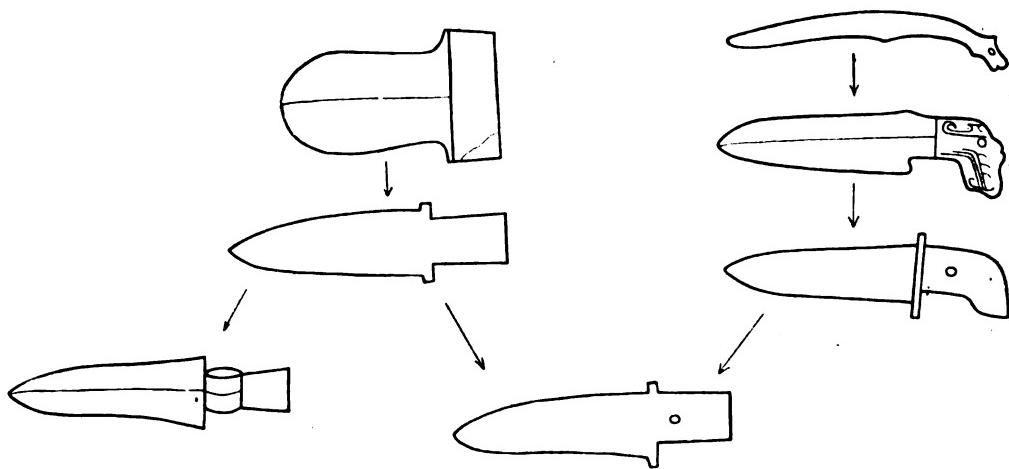


Fig. 11.

formation given rise to type 133, which is really a misunderstood and violently changed 118. Then again, this type 133 has after another long period of evolution resulted in types 141, 142, with the décor scheme strongly dissolved. Furthermore, the axe type IX, fig. 7, in itself already a secondary stage in relation to the animal-head knife 175, has been instrumental in causing the modification of type VII, fig. 3, into type VIII, fig. 9, the latter in its turn having undergone a long evolution resulting in several variants in both shape and décor.

It must be conceded that all these vehement transformations cannot have taken place in the course of a few years, nor even in a few decades; they have required centuries. We arrive inevitably at the following important conclusion:

The »inward-curving» animal head knives (type 175) must have existed in An-yang at a very early date, since they have given rise to several long processes of development, all of which they had passed through before the fall of the Yin; accordingly their first appearance in An-yang cannot possibly be placed as late as in the 11th century, they must have existed there already at the beginning of the An-yang era, i. e. in the 13th century B. C.

In the light of this fundamentally important fact we must now test the two opposite theories regarding the priority of China (White) or Siberia (Kühn) in producing such »animal-style» artifacts. The historical connection between Yin-time China and the Nomad culture of Suei-yüan-Siberia is positively certain, through a considerable series of artifacts possessing a close affinity, as described in detail above. Thus, either the Nomad culture influenced Yin-time China or *vice versa*.

Let us first assume that the former (Kühn's theory) is true. What would it imply?

In Siberia, the animal-head knives and daggers crop up for the first time in the period which Teploukhov calls Kara-Suk, and in exactly the same period the ring-

head knives likewise make their first appearance in Siberia. Both types exist in An-yang, and with Kühn's theory we must keep the two types of artifacts together and conclude that they both entered China during the same epoch, as an influence via Suei-yüan. Now it has been proved above that the animal-head knives (and consequently also the closely related animal-head daggers, class XIV) existed in An-yang in the 13th century B. C. If all these various types (animal-head and ring-head weapons) were due to an influence from the North, we must conclude that a culture sufficiently strong and richly developed to have produced these »Kara-Suk« types existed in Siberia-Suei-yüan at least as early as in the 13th c. B. C. Moreover it must have been very vigorous indeed to have had the power to influence the Chinese high culture so fundamentally as to leave deep traces in a whole series of Chinese ritual weapons. It must, in other words, have been a Siberian-Suei-yüan high-culture of imposing strength, and reasonably with a considerable measure of political organization. Is this historically probable?

There has been a voluminous discussion as to the land of origin of the »Animal style«. Tallgren (*Acta Archaeologica* 1933) has proposed that it was due principally to Iranian influences via the borderlands of Sogdiana, Bactria, Ferghana. With the dating in the 13th century this theory would hardly be supportable, and we should have to revert to Borovka's opinion, recently endorsed by Minns¹⁾, that it has grown out of the local ground in Siberia, connecting up organically with the Siberian Stone Age. But if this is so, are there any sources in support of the existence of a Siberian-Suei-yüan high-culture at such an early date?

From the Western side we have hardly any hope of finding any literary confirmation. The only chance would be the Chinese literature, that great thesaurus of Asiatic history.

It may be said to be safely established that the Ordos-Suei-yüan-Mongolian province of the Nomad-style art in Han time belonged to the civilization of the Hiung-nu empire, i. e. that of the early Huns. If we could ascertain that some direct ancestors of the Huns had any important state on the northern confines of China many centuries earlier than the Han dynasty, it might offer at least some support for Kühn's theory.

There is an oft-repeated statement that the ancestors of the Hiung-nu were the Hien-yün, and that they were also called Hün-yü, all these forms being Chinese variations of one and the same tribal name. This we find stated by Hirth²⁾, and de Groot³⁾, and the Hien-yün are declared by Maspero⁴⁾ and Pelliot⁵⁾ to be the ancestors of the Hiung-nu. But this ethnical identification is entirely a specula-

¹⁾ Elliot H. Minns, *The Art of the Nomads*, 1942. When Minns confirms the thesis by adducing Stone-Age axes with animal-head terminals found in Finland (Karelia), he is certainly very bold.

²⁾ F. Hirth, *The ancient History of China*, 2nd ed. 1923, p. 66-70.

³⁾ J. J. M. de Groot, *Die Hunnen der vorchristlichen Zeit* 1921, p. 2, 6, 18.

⁴⁾ H. Maspero, *La Chine antique* 1927, p. 60.

⁵⁾ P. Pelliot in *T'oung Pao* 1932, p. 268.

tion of Han-time scholars. Sī-ma Ts'ien in his *Shī ki* still expresses himself very vaguely; at the beginning of his monograph on the Hiung-nu he says: »Before T'ang and Yü (i. e. the legendary emperors Yao and Shun) there were Jung of the Mountains, Hien-yün and Hün-yü», thereby suggesting these three kinds of tribes as ancestors of the Hiung-nu. It is only in Eastern Han time that Hien-yün and Hün-yü were identified as one and the same people. Fu K'ien (2nd c. A. D.) says: »At the time of Yao they were called Hün-yü, the Chou called them Hien-yün, the Ts'in (3rd c. B. C.) called them Hiung-nu». And Chao K'i (2nd c.) in comm. on Mencius: Liang Huei wang, hia, says: »Hün-yü were the strongest of the p e i t i Northern Ti barbarians, the present Hiung-nu». This speculation seems to be based to some extent on the slight similarity in sound. But this similarity disappears entirely if for the modern forms we substitute the reading of the words in early Chou time: *χiam-ziwən* (= Hien-yün); *χiwən-djok* (= Hün-yü); *χiung-no* (= Hiung-nu). In fact the Hien-yün and Hün-yü are only heard of in the early period of the Chou dynasty (see further below), and the Hiung-nu only appear in the 3rd c. B. C. For 400 years the texts make no mention of any connection between them. The reason for the speculation of the Han scholars is obvious: in Han time, China had the Hiung-nu as her most formidable foes and neighbours in the North. In early Chou time, the Chinese had to fight the Hien-yün as their most feared northern neighbours: therefore the Hien-yün were the ancestors of the Hiung-nu! Such »history» deserves no serious consideration.

What do we know, then, of the Hien-yün and the Hün-yü? The Hün-yü are mentioned by Mencius (*loc. cit.*), who says that T'ai-wang (great-grandfather of Wu wang, the first Chou king) »served» i. e. was deferential to the Hün-yü, who were evidently some dangerous neighbours. But that is all we know of them, and there is no pre-Han support whatever for their being identical with the Hien-yün. A much more prominent part was played by the Hien-yün. They are mentioned as foes in the North of the Chou kings on the one hand in the *Shī* king, four odes of which describe war expeditions to the North against the Hien-yün (odes 167, 168, 177, 178). Of these, all ancient *Shī* schools agree that 177 and 178 refer to Sūan wang's reign (827—782 B. C.). As to odes 167 and 168, the *Shī* Preface (probably written by Wei Hung in middle Han time) refer them to Wen wang, father of the first Chou king; but the Ts'i school refers ode 167 to the reign of Yi wang, the 7th Chou king (9th c.) and both the Ts'i and the Lu schools refer ode 168 to Sūan wang's time, together with odes 177, 178. On the other hand, three bronze inscriptions of Western Chou mention Chinese attacks on the Hien-yün: one is the Kuo ki Tsī po P'an (Karlgren, BMFEA 8, p. 44, B 107), which is datable in Yu wang's time (781—771 B. C.); one is the Pu K'i Kuei (*ibid.* p. 47, B 133) which cannot be exactly dated but cannot under any circumstances be earlier than the 6th Chou king (circa 900 B. C.); the third is the Hi Kia P'an (*ibid.* p. 56, B. 705), which was made in 823 B. C.

Briefly summed up: of the Hün-yü we know nothing beyond the bare fact that they were the neighbours of Wu wang's great-grandfather, and there is nothing to connect them with the Hien-yün or the Hiung-nu. The Hien-yün, which can in no way be attested as having been proto-Hiung-nu¹⁾, were evidently a strong power to the North of Royal Chou, i. e. somewhere in northern Shensi, but they are safely attested as having been a great power only so late (far into the Chou dynasty) that they are of no use to us when searching for literary support for a northern high-culture in the 13th c. B. C.

The genuine Yin time documents: the oracle bone inscriptions and a few bronze inscriptions, are so brief and terse that they offer no evidence. In the oracle inscriptions we often find that the Yin kings undertook warlike expeditions against hostile neighbours, but we hardly know anything of their geographical position, nor whether they represented any more advanced political and cultural stage.

Thus, we cannot find from Chinese historical sources, any more than from Western sources, any *points d'appui* for a high culture or political great power in the Northern regions in the time of the Yin dynasty.

Kühn's theory, which would necessitate the assumption of such a high culture in the Siberian-Suei-yün steppe zone in the 13th c. B. C., is thus historically unascertainable, it must be founded on archaeological facts alone. But how does it satisfy these facts? As is clearly shown by Schefold (ESA XII), it is not the earliest phase of Scythian art in Russia (7th c.) on the one hand and the Kara-Suk in Siberia on the other hand that shows any fundamental and serious interrelations. It is the middle period in the West (circa 500 B. C.) and the period of the kur-gans in Siberia which show such intimate connections. With Kühn we should therefore have to surmise that the »animal style« of Siberia, characterized by animal-head and ring-head weapons, flourished in splendid isolation for a period of some 800 years (1300—500) before the contacts with South Russia were seriously established. This is a much too improbable construction. The chronological discrepancy is too great, and that time scheme is not acceptable.

Let us now turn to the other theory (White's), which makes China of the Yin dynasty the primary source of the types of artifacts which are common to Anyang and Siberia-Suei-yün and which are sufficiently peculiar and characteristic to have a decisive value as evidence: animal-head knives and daggers (XIII, XIV), ring-head knives (XI), jingle-head knives (XII), axes of type III, horse's frontlets (XV) (the last element already recognized as primarily Chinese by Tallgren in 1917). If we consider China as their land of origin, where at least some of them (XIII, XIV) have been proved to have existed as early as in the 13th century, we are not compelled to accept that early epoch (13th c.) as the time of their wandering northwards to the steppe region. The Yin art continued not only from the 13th century to the end of the dynasty in 1028, but also during the first century

¹⁾ G. Haloun is not deterred by the scantiness of our knowledge of the Hien-yün from identifying them with the Cimmerians (sic!), Z. D. M. G. 1937, p. 317.

of the Chou dynasty. We have studied this phenomenon extensively elsewhere (Karlgren in BMFEA 8 and 9) and we have found that ritual vessels in pure Yin styles (A and B) continued to be cast during the reigns of the first five Chou kings (as far as \pm 900 B. C.). We have therefore a perfect right to suppose that specimens of the types of weapons in question continued to be produced in China not only to the end of the Yin but also during the first Chou century, i. e. the 10th c. B. C. A fortunate example of this is our axe 189, found in Lo-yang and certainly dating in early Chou time, which is very closely related to the Yin axe 118 of class IX (a modification of type 175). We are then perfectly entitled to suppose that the Chinese influence did not reach the steppe region until towards the close of the long epoch of the Yin art, i. e. the last Yin and the first Chou centuries, types XI—XV and III wandering northwards only in the 11th—10th centuries B. C.¹⁾

It would seem, therefore, that we are in full agreement with Teploukhov's scheme for Siberia, which dates the first appearance of the Kara-Suk culture (with animal-head knives and daggers) around 1000 B. C. But that is not, in fact, the best interpretation. This would still imply that such animal-head terminals existed in Siberia for 500 years before they reached the Scythian province in the West. That is not so unsatisfactory as Kühn's computation (a time difference of 800 years), it is true, but it is still a chronological discrepancy far too wide to be convincing. But once we have decided upon China as the land of origin of these types (XI—XV and III) we may construe a much more organic and chronologically satisfactory evolution. It is not very probable that the Chinese influence by one great leap reached not only Suei-yüan but also the distant Yenissei region. It is much more reasonable to assume a successive migration of all these elements towards the North and West:

In the 11th—10th centuries all these types from An-yang gained the immediate neighbours in the North, the people of Ordos-Suei-yüan-Mongolia. They gradually wandered further westward and reached the Siberian Yenissei region (and also the Baikal region, specimen 235) somewhat later, say in the 8th century. Therefore we find all these types — animal-head and ring-head and jingle-head weapons, axes of type III and frontlets — in this Siberian province. Some of these types (the ring-head knives, axes III and frontlets) never reached any further. But the animal-head terminals passed on one great step further westward and reached Scythia around 500 B. C. The fact that these particular types had greater success and penetrated further to the West may be due to a convergence: the idea of

¹⁾ It is important to observe that the Chinese influence cannot have been exercised later than \pm 900 B. C., for we have no reason to believe that the types of classes XII—XV and III existed in Middle Chou or Huai times. Neither in the Sün-hien finds, nor in the Sin-cheng, the Kin-ts'un, the Shou-chou or the Li-yü finds do we find any traces of such types. As to class XI, the ring-head knives, they crop up again in late Chou time (considerably modified in shape) as knife-coins, but that is in all probability a re-import from the North, since they are typical of the Chinese feudal kingdoms of the North and North-east.

animal-head terminals (though of a different type) existed also in other more westerly cultures, and that may have facilitated this particular kind of art loan from Siberia.¹⁾ In this way we can account quite organically for the gradual passage of Chinese Yin-time motifs, *étappe par étape*, across northern Asia.

Finally, it should be emphasized, that in the above discussion on the interrelations between Yin-time China and the Nomad culture of Suei-yüan and Siberia I have strictly kept to such elements of the Nomad Animal art style as can be directly correlated with Chinese types. I do not at all pronounce any views on all the other typical features of the Nomad Animal style and their possible origin, nor on the intricate question of the relations between the Mongolian-Siberian and the Scythian provinces of the Animal style as a whole. The only aim of this discussion was to show that certain features of the Nomad art can best be explained as being due to an influence from Yin-time China. This conclusion is necessitated by chronological facts which are undeniable, since the An-yang culture can be dated almost exactly.

¹⁾ A bracelet with animal-head terminals (very different in type from the Chinese-Suei-yüan-Siberian specimens) of the Oxus treasure has a good counterpart in pure Achaemenid art, see Minns, Scythians and Greeks p. 256 compared with p. 271.



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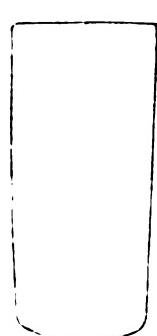
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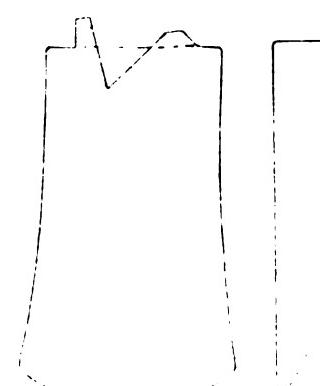
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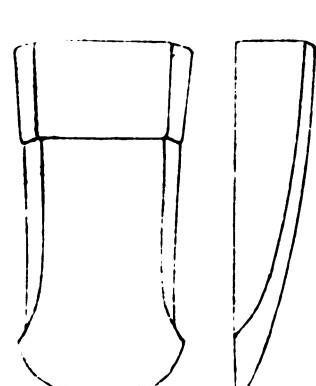
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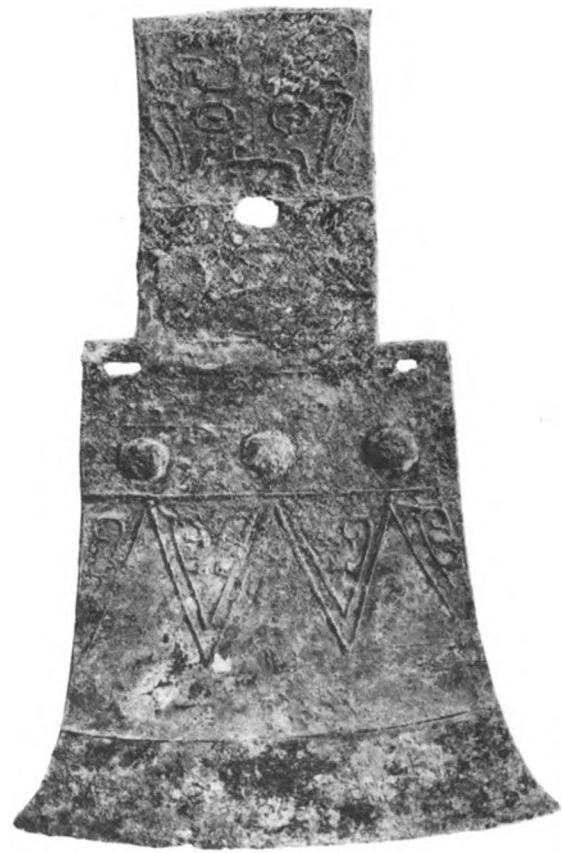
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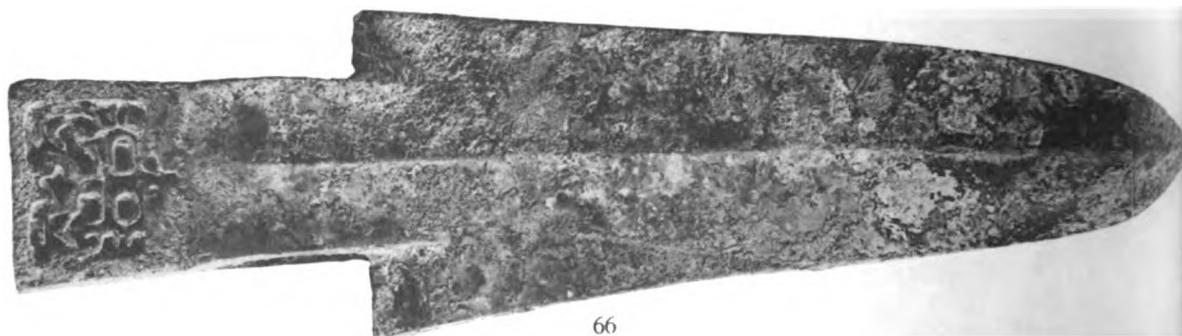
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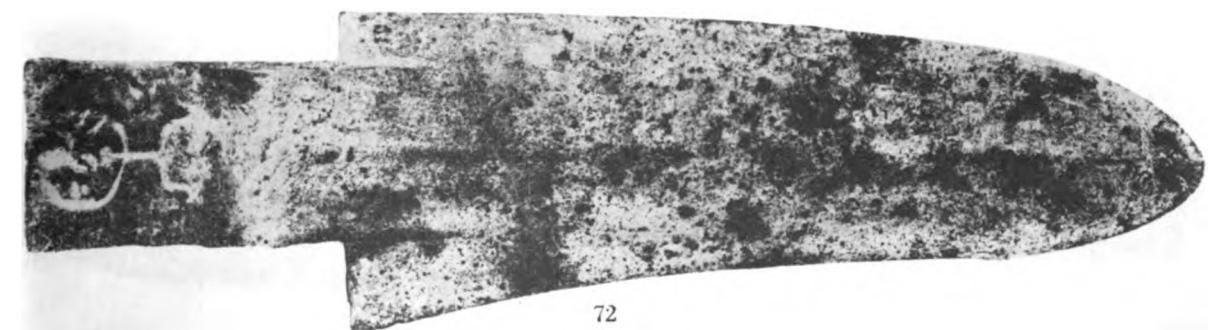
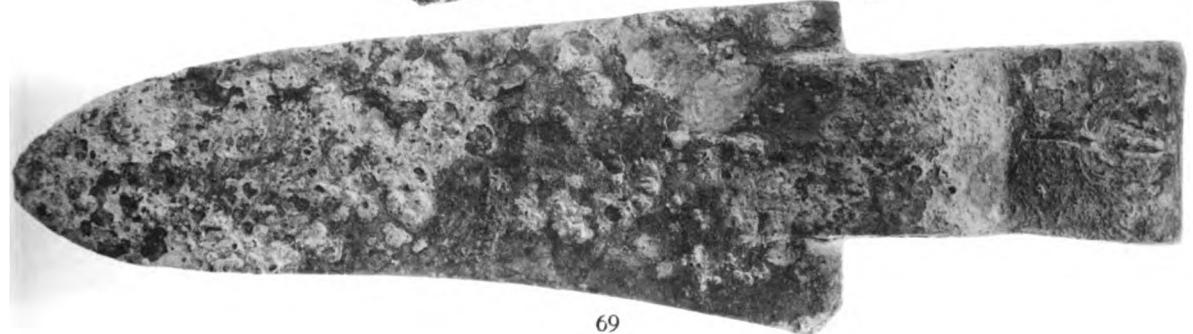
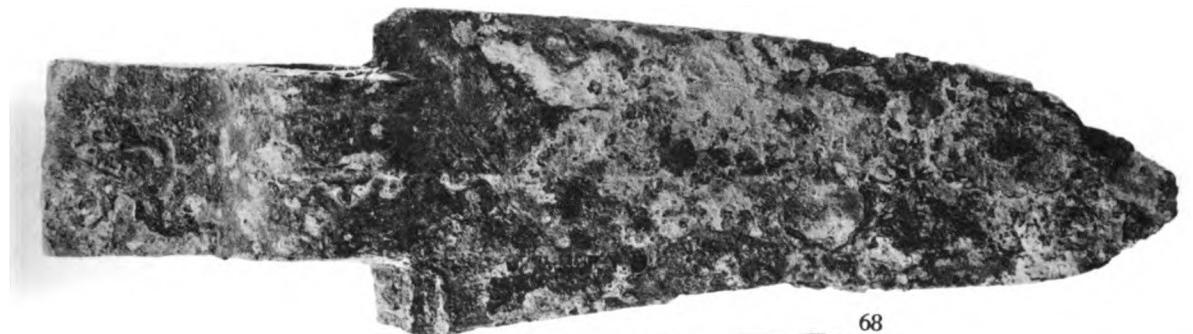
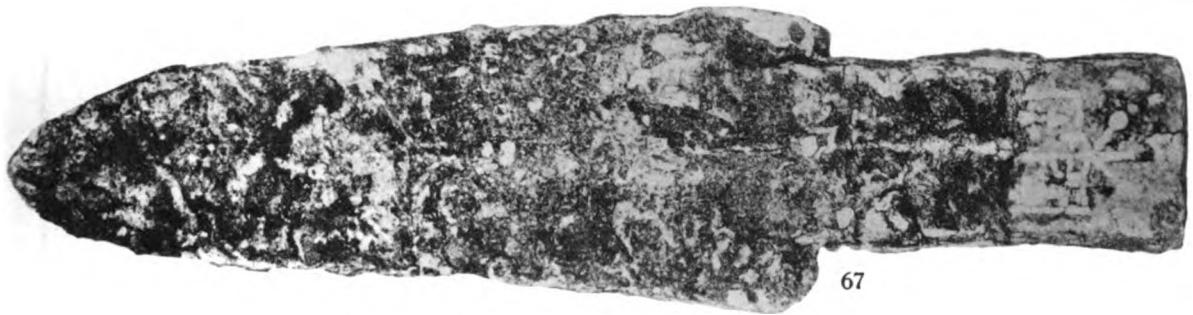
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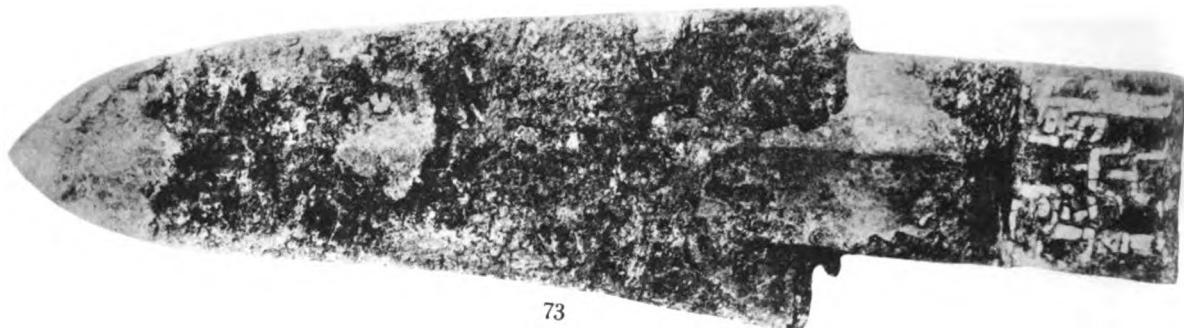


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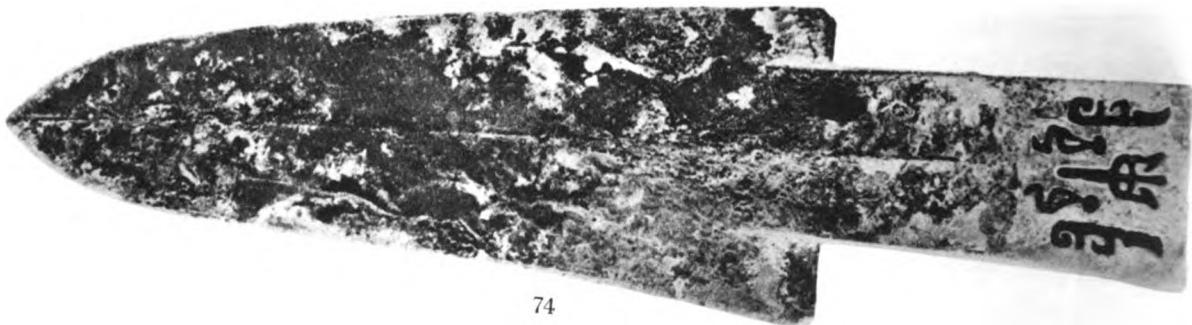


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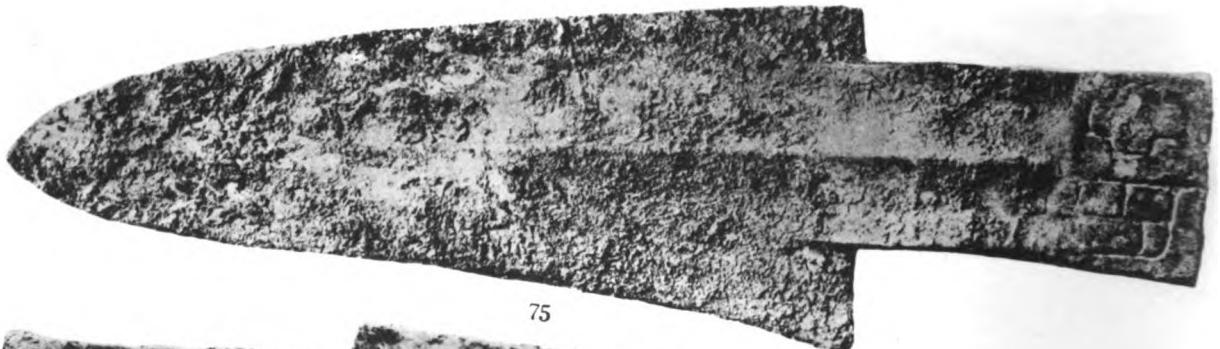




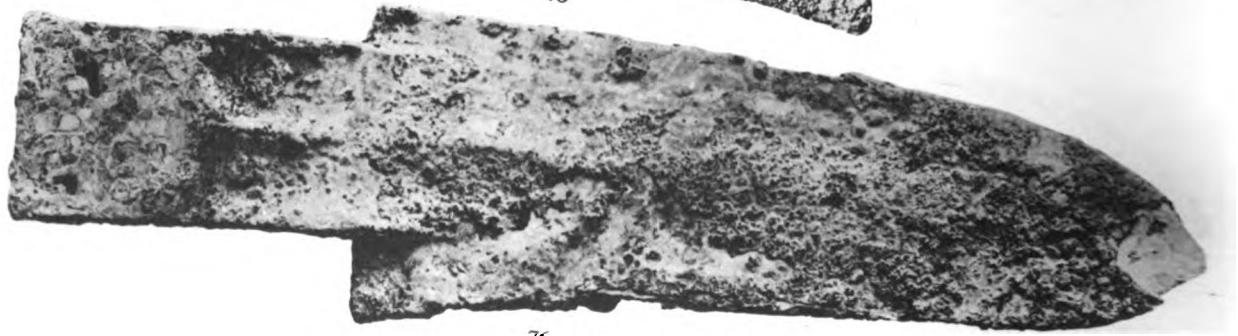
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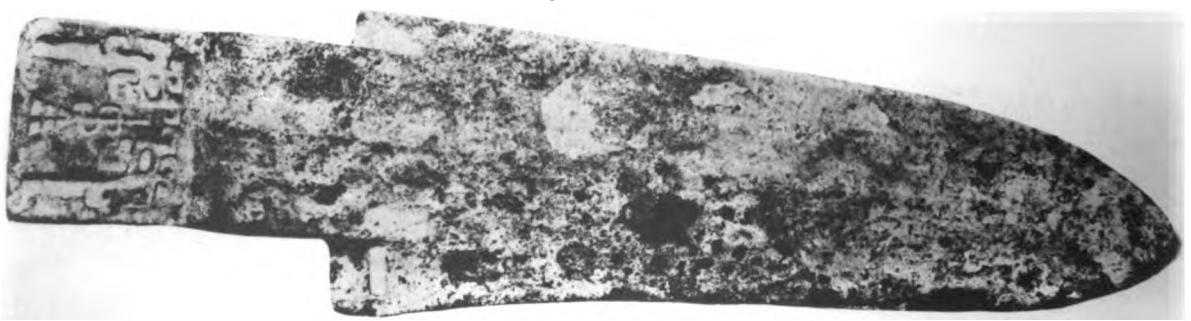
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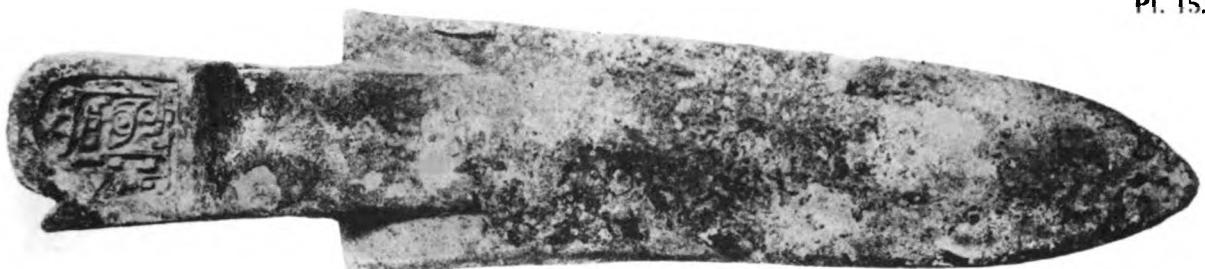
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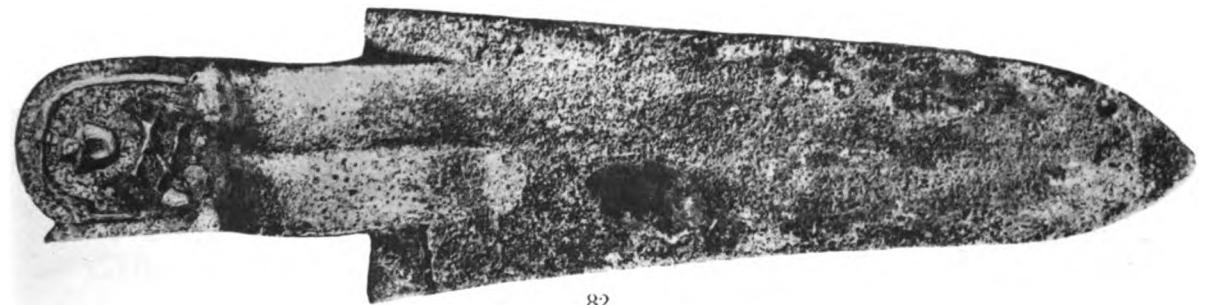
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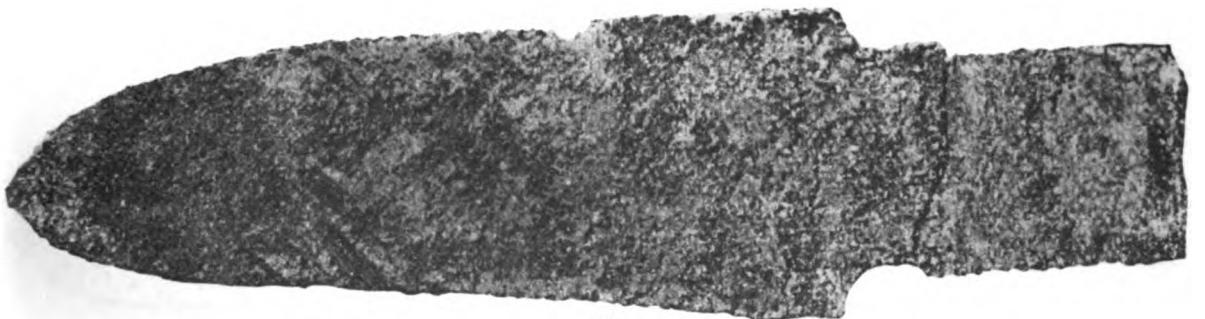
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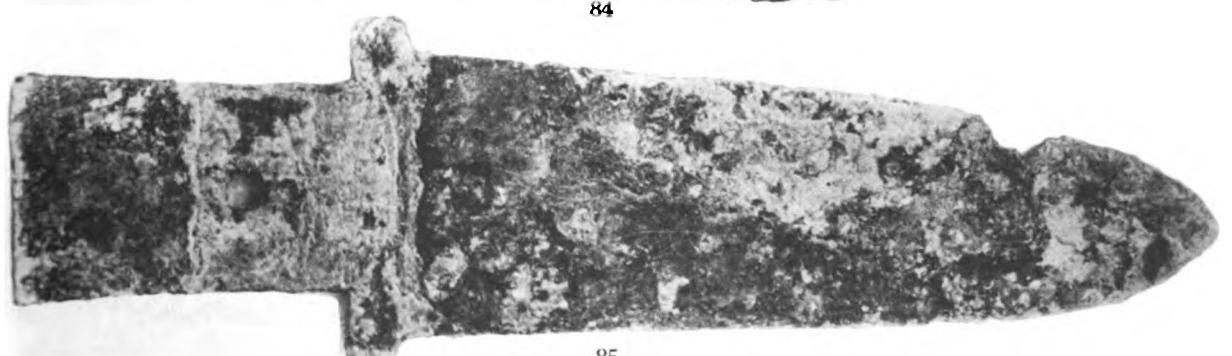
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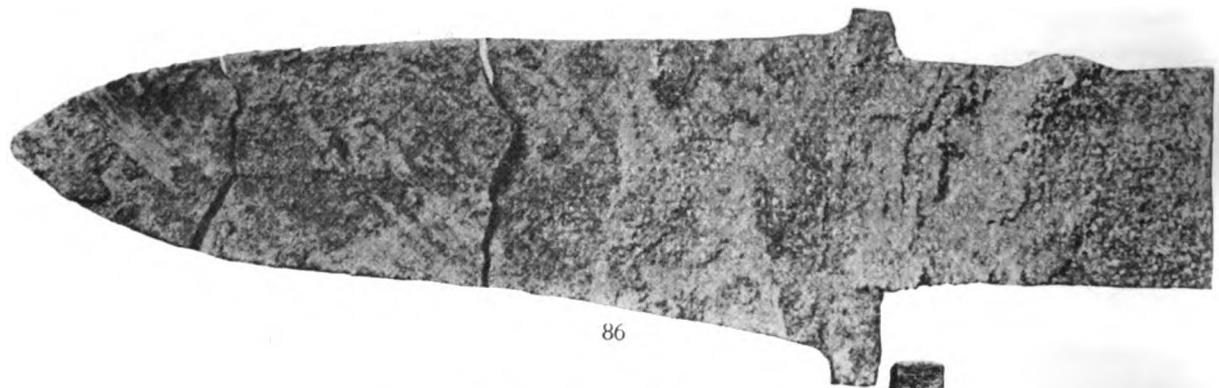
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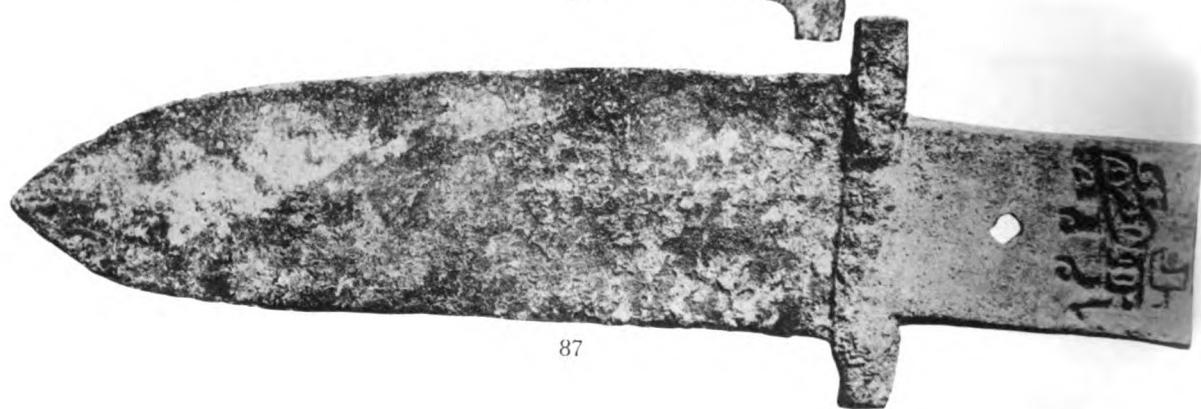
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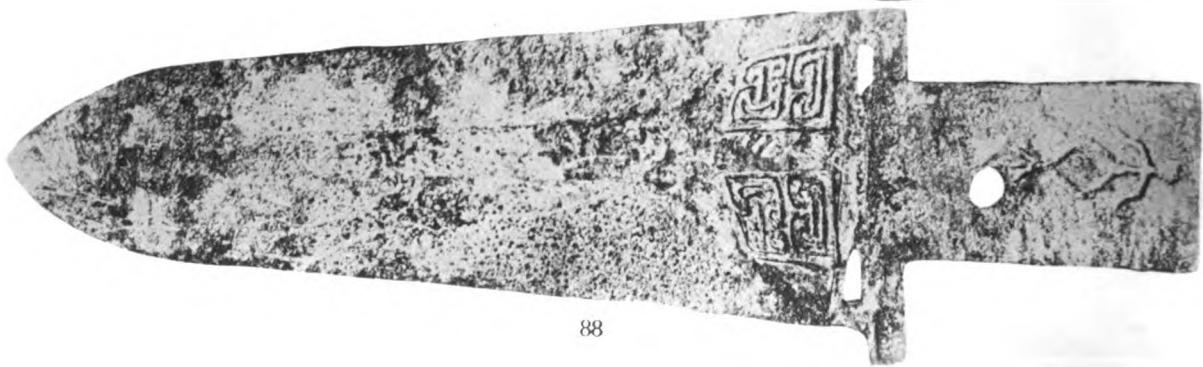
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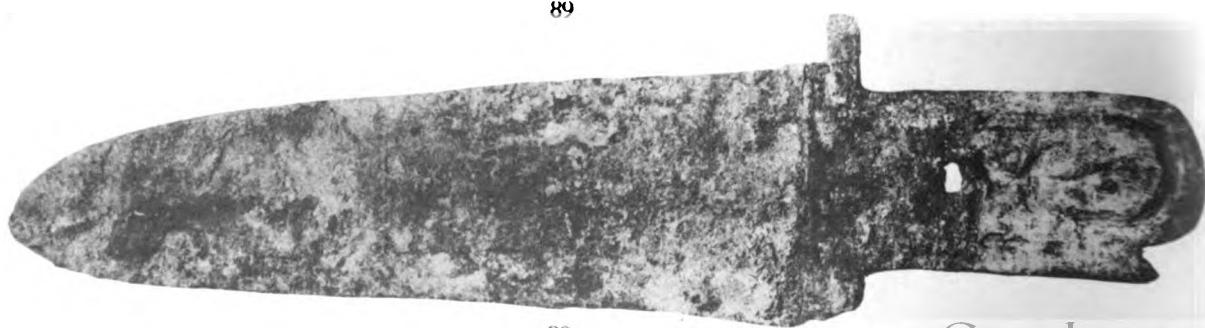
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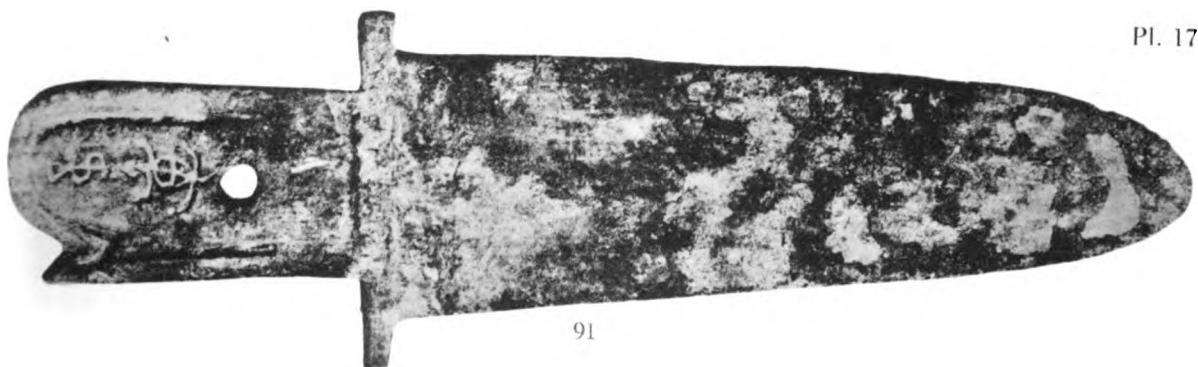
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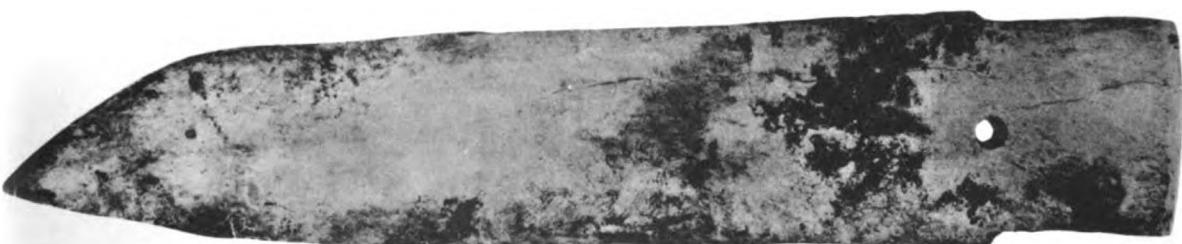
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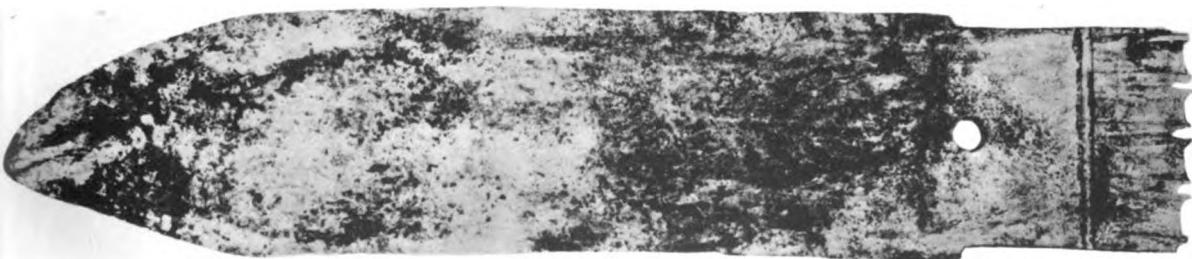
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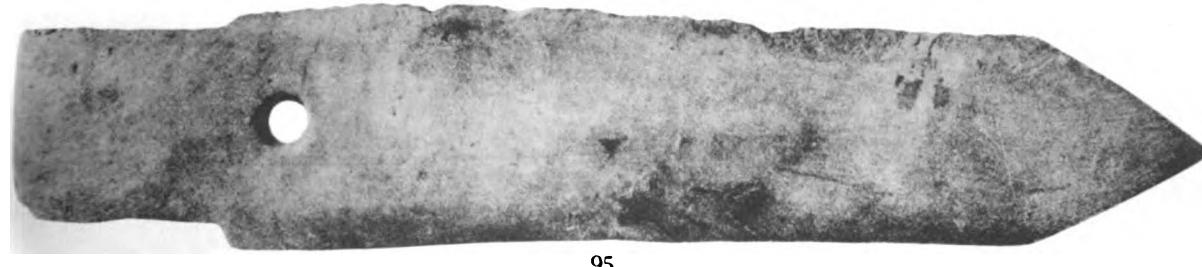
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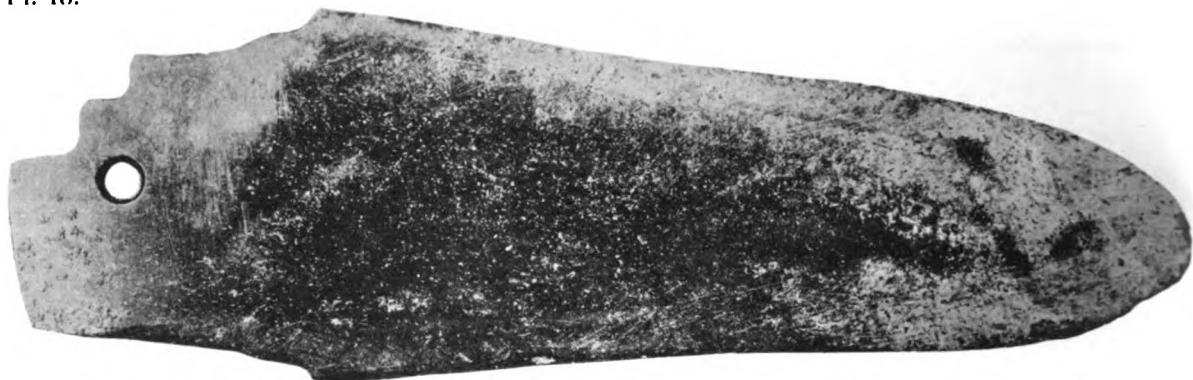
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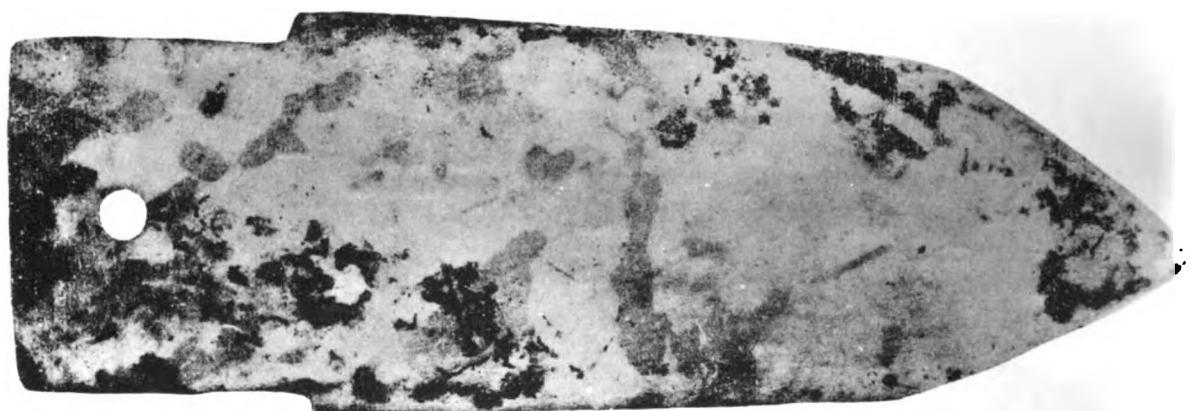
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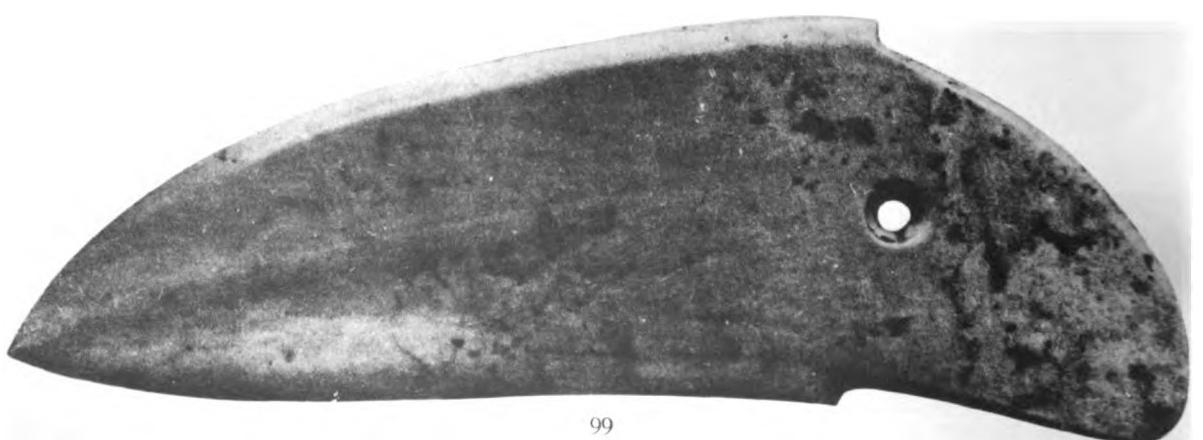
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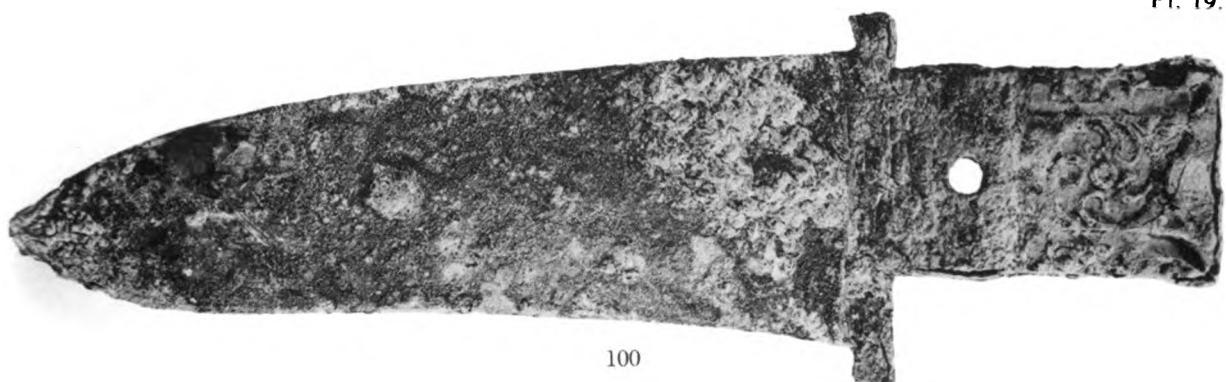
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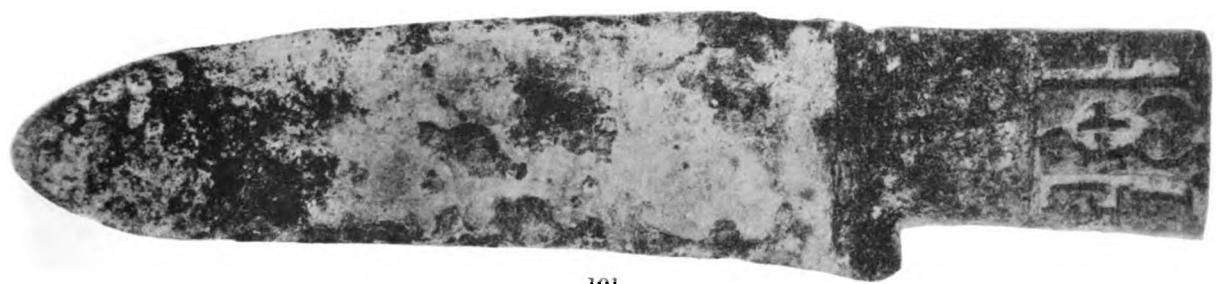
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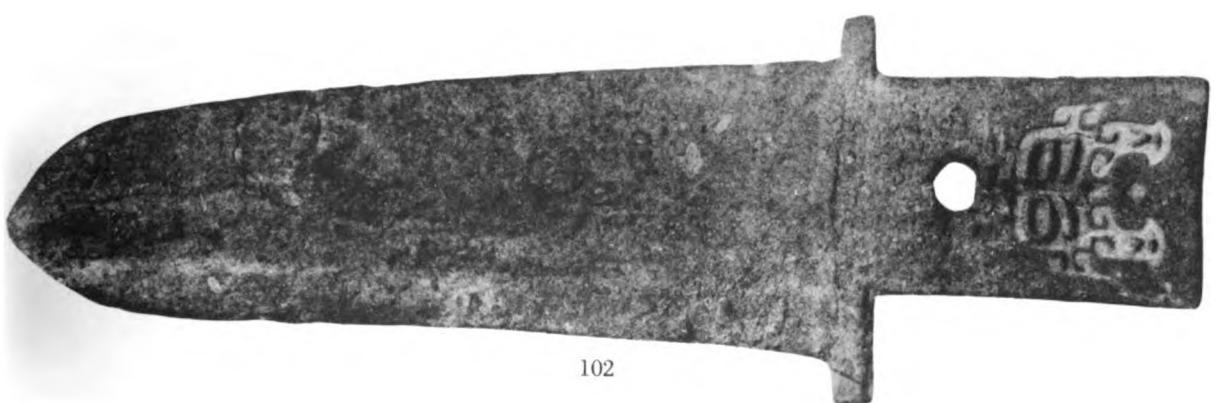
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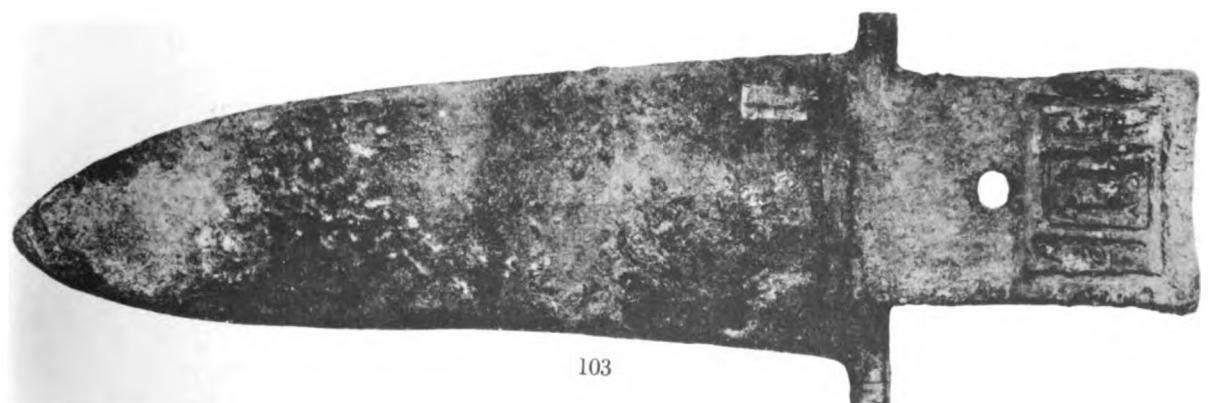
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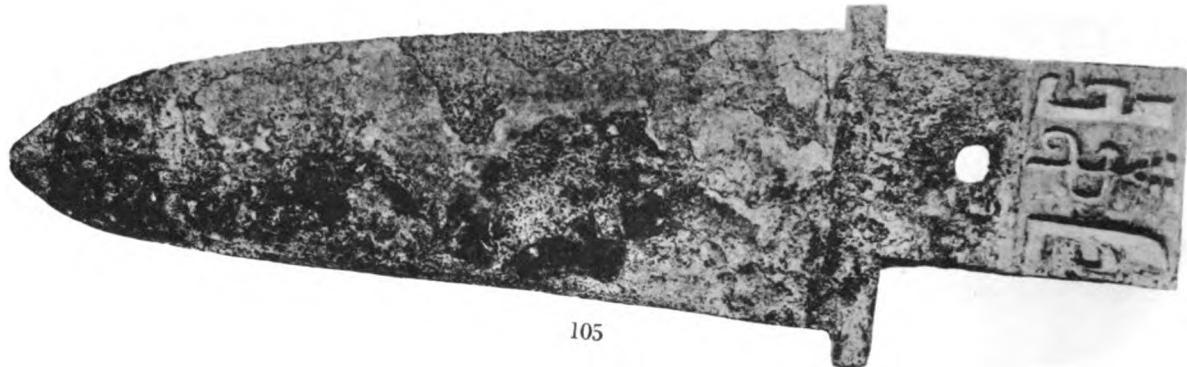
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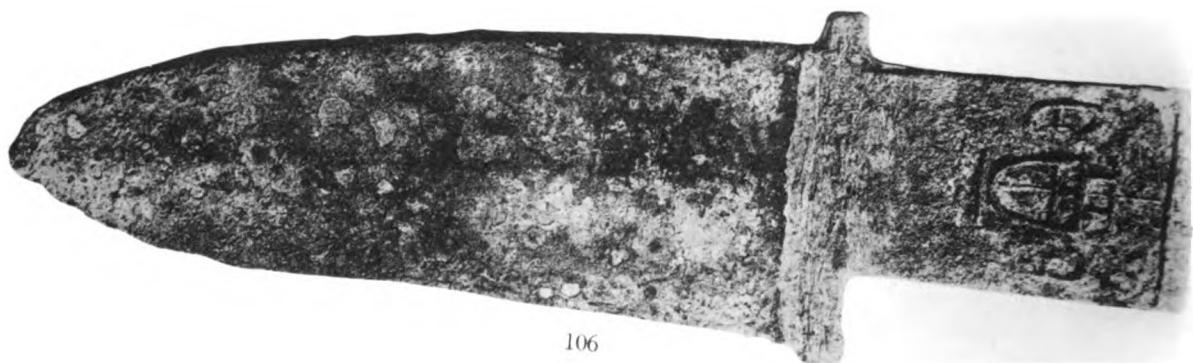
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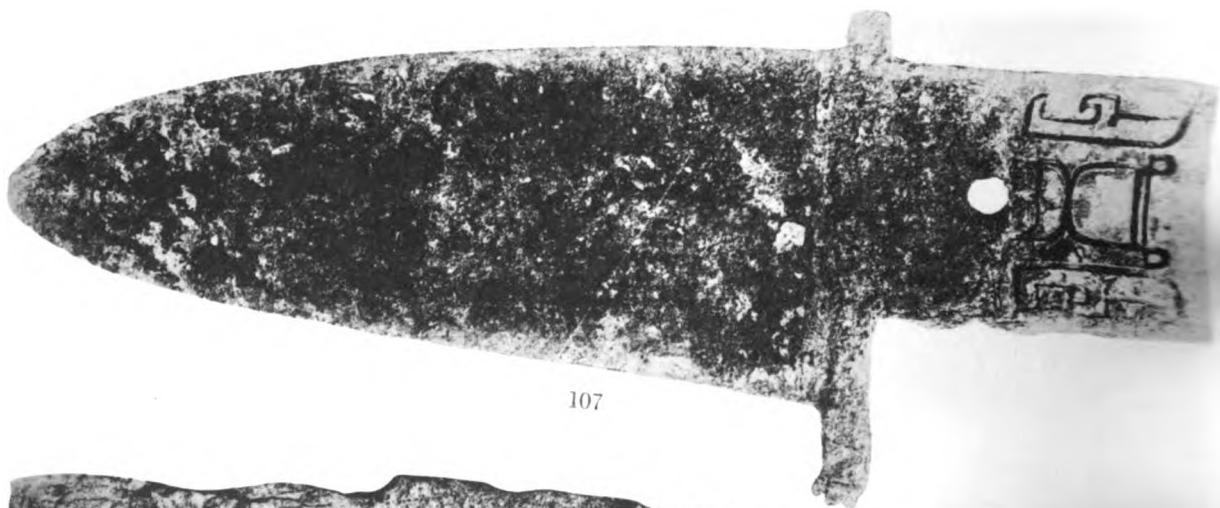
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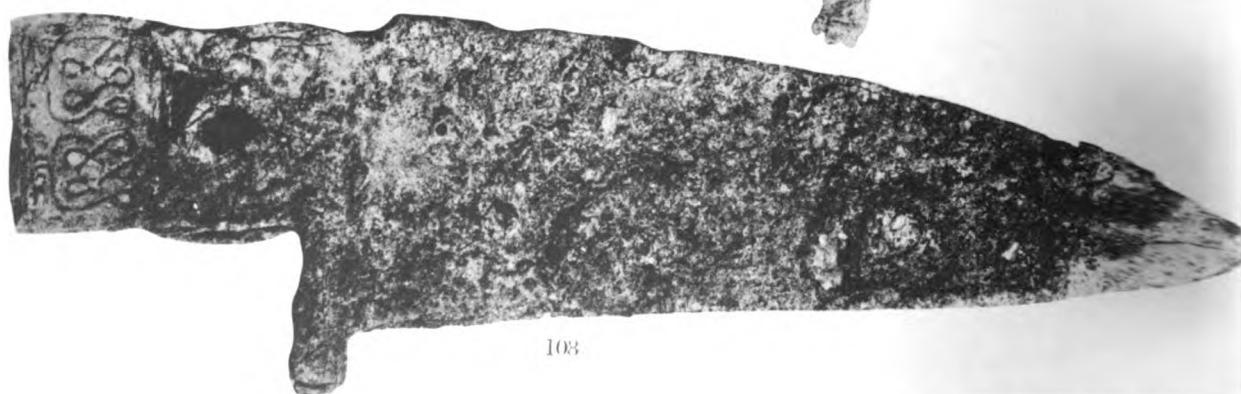
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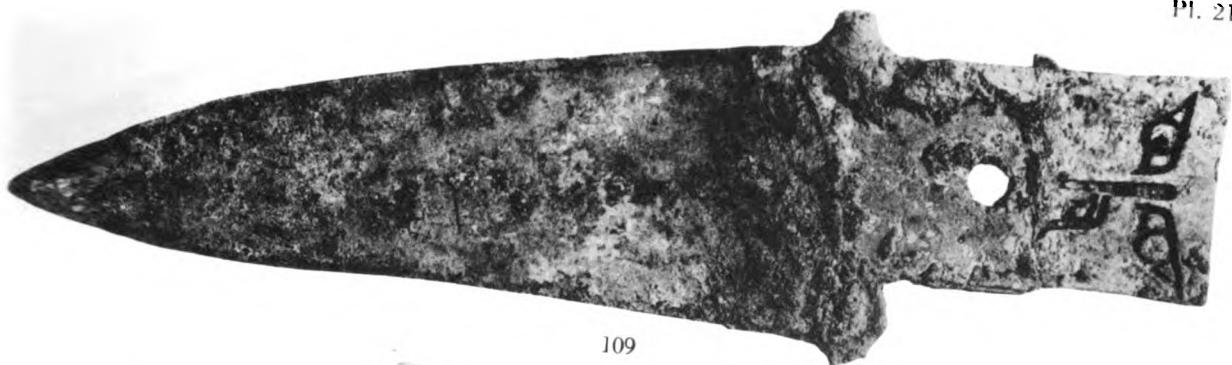
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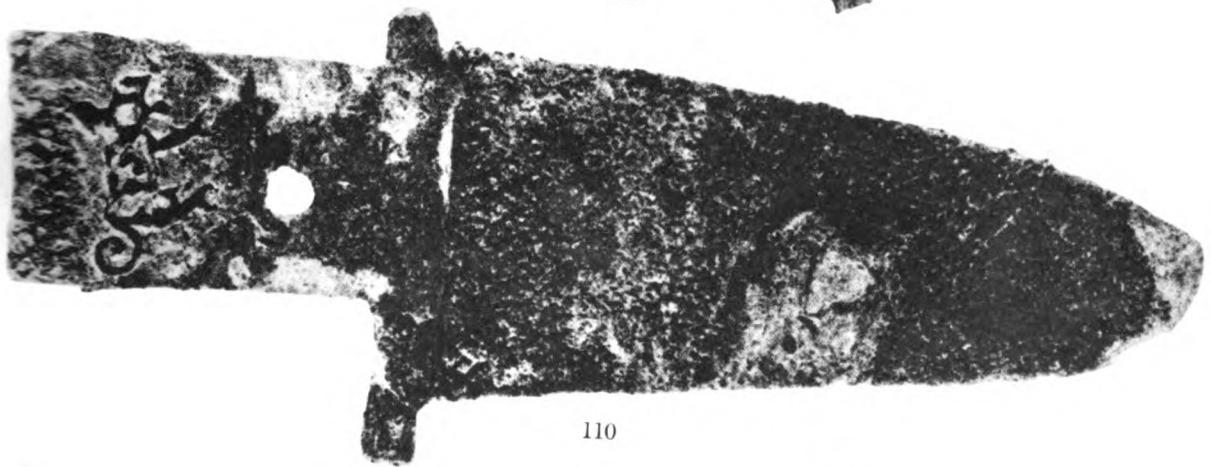
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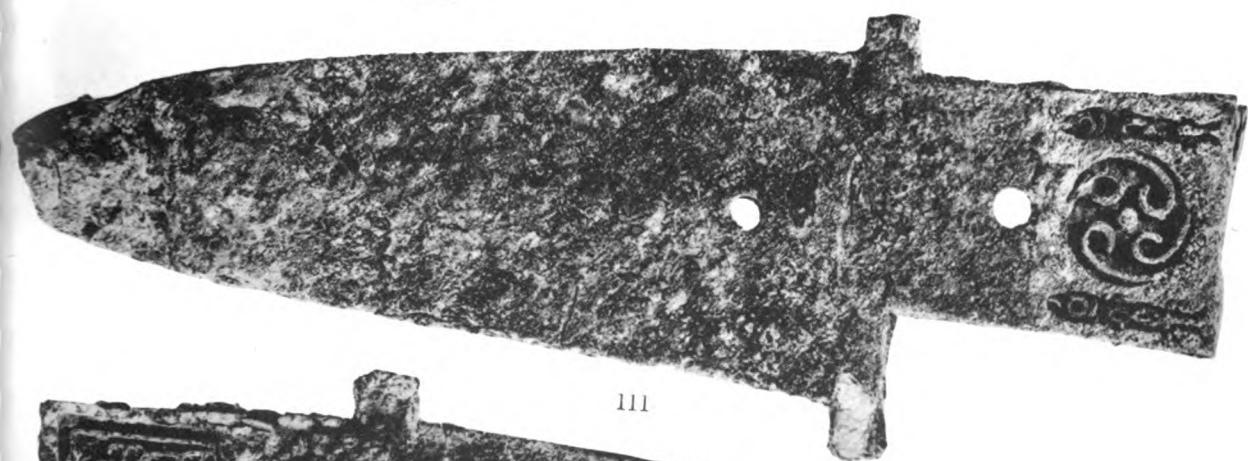
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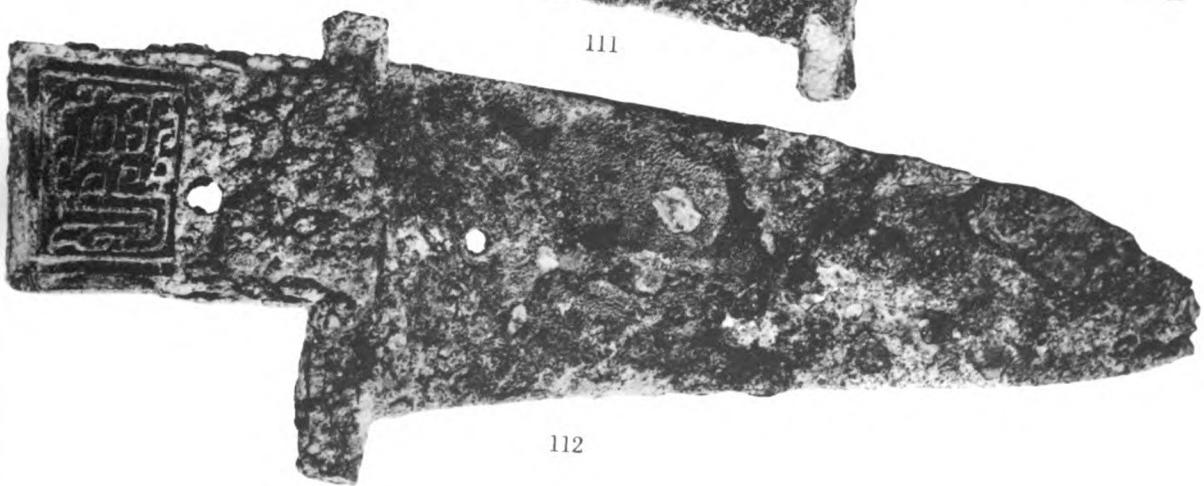
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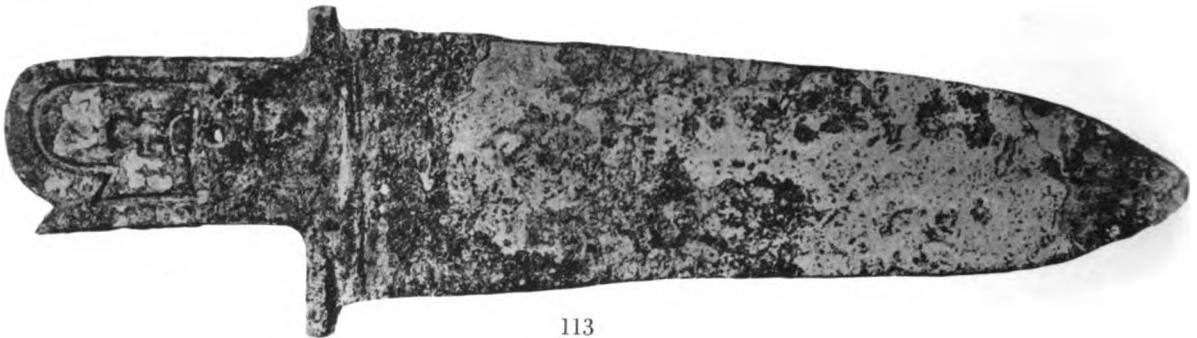
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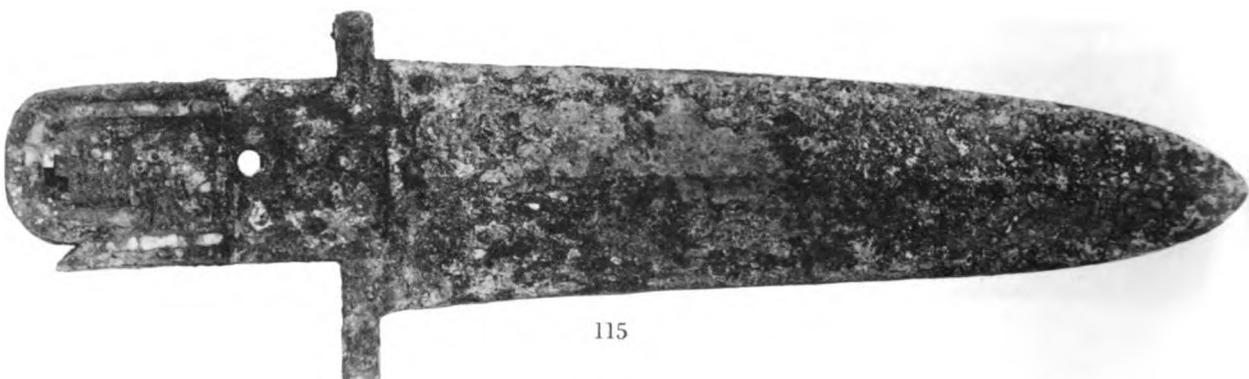
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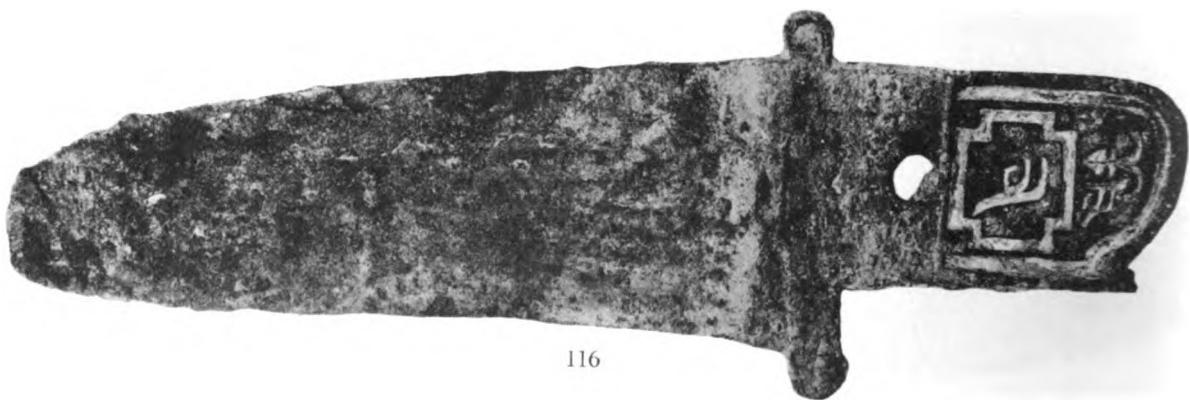
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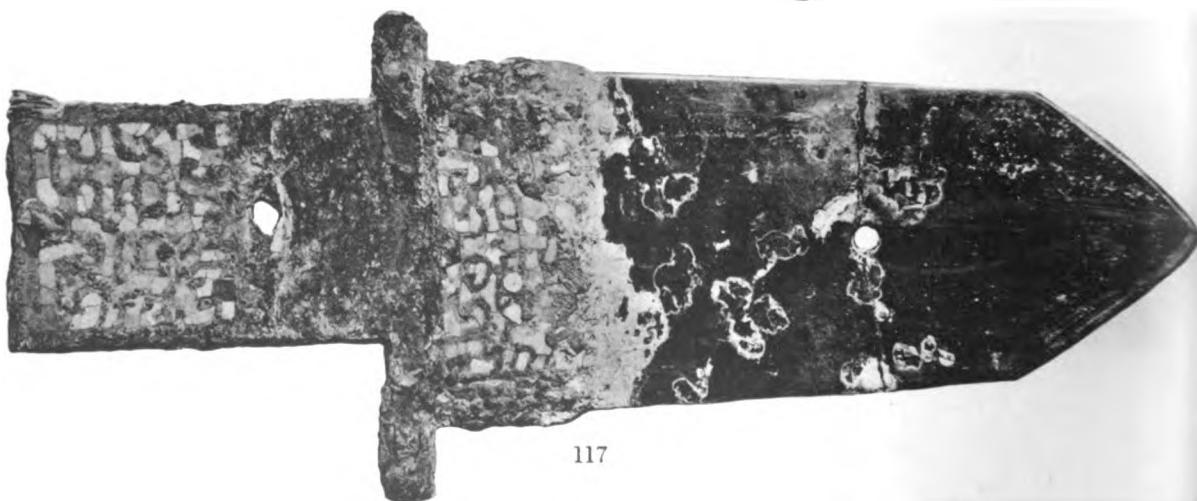
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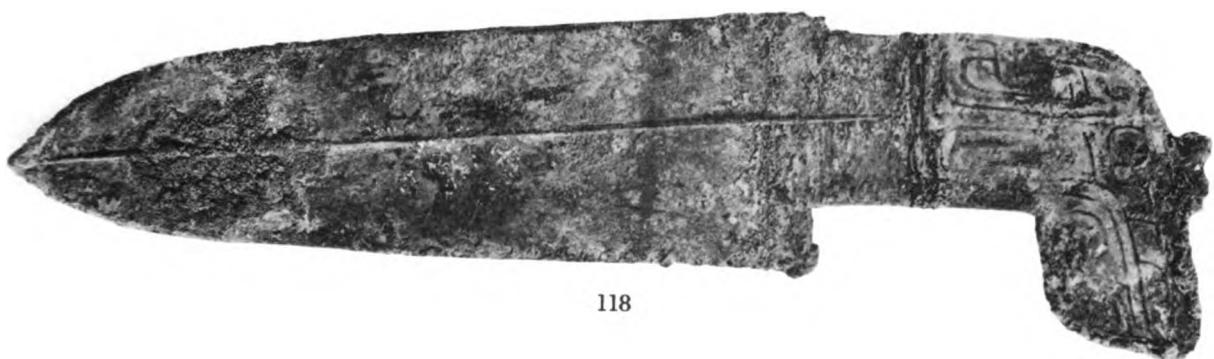
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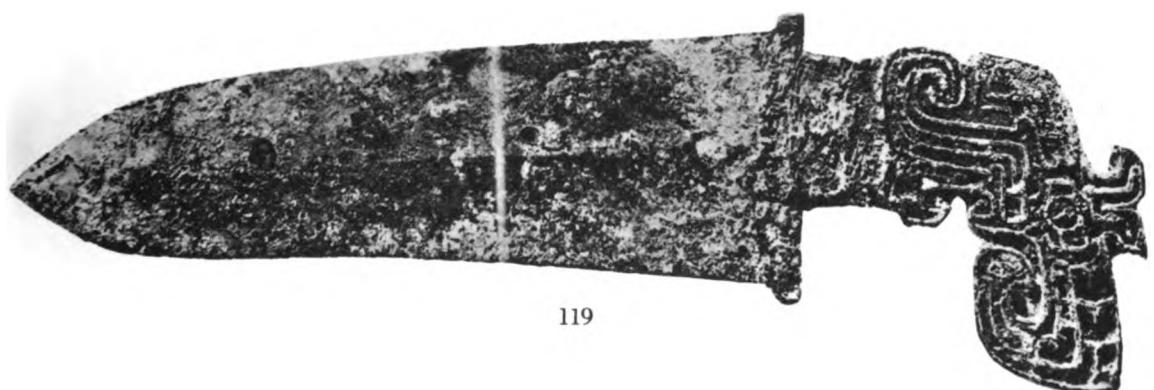
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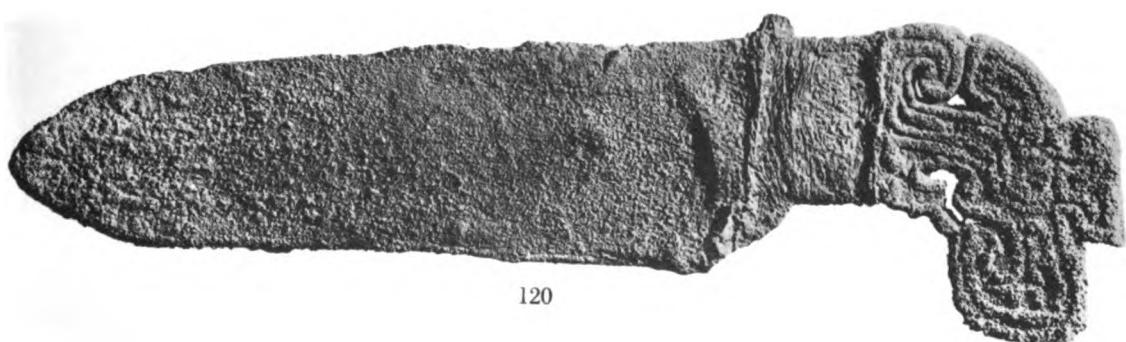
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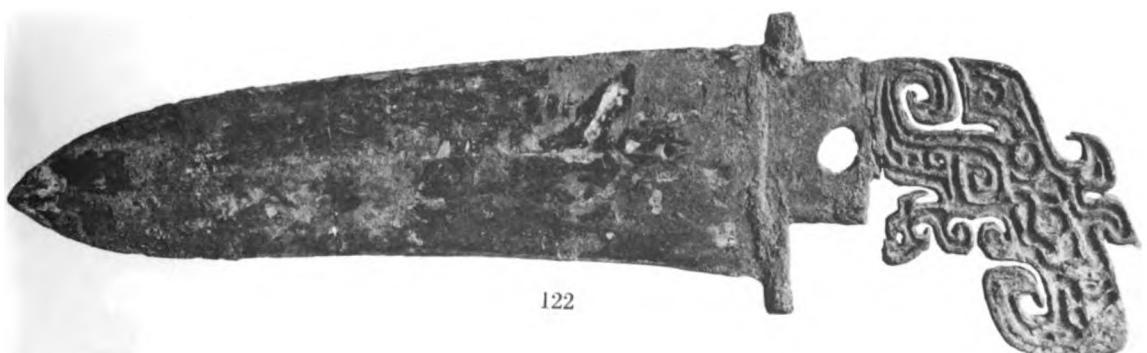
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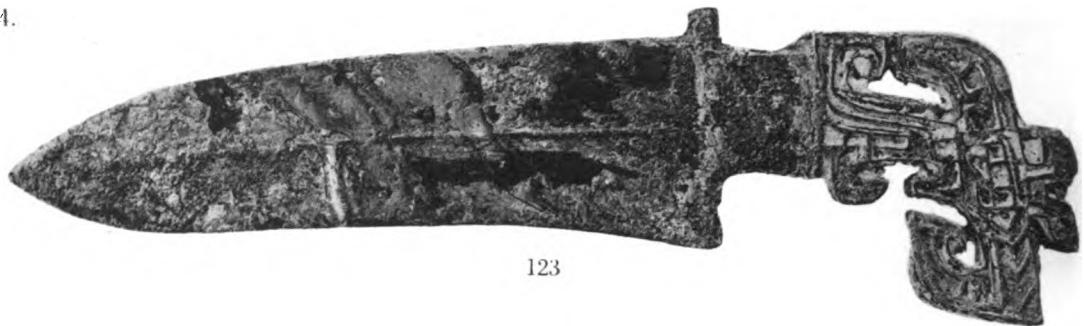
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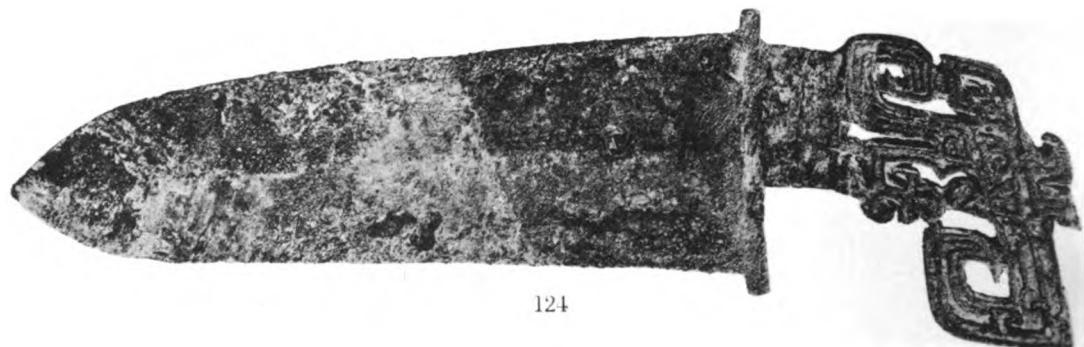
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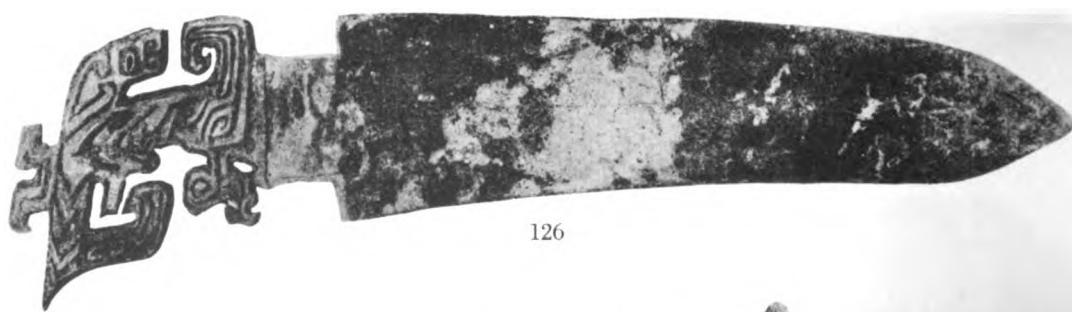
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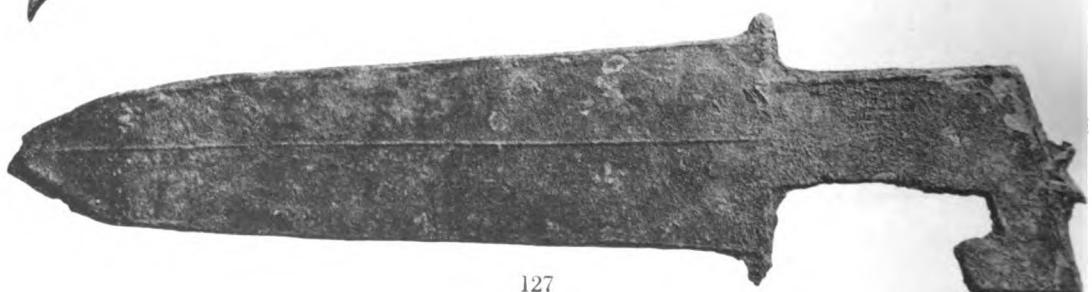
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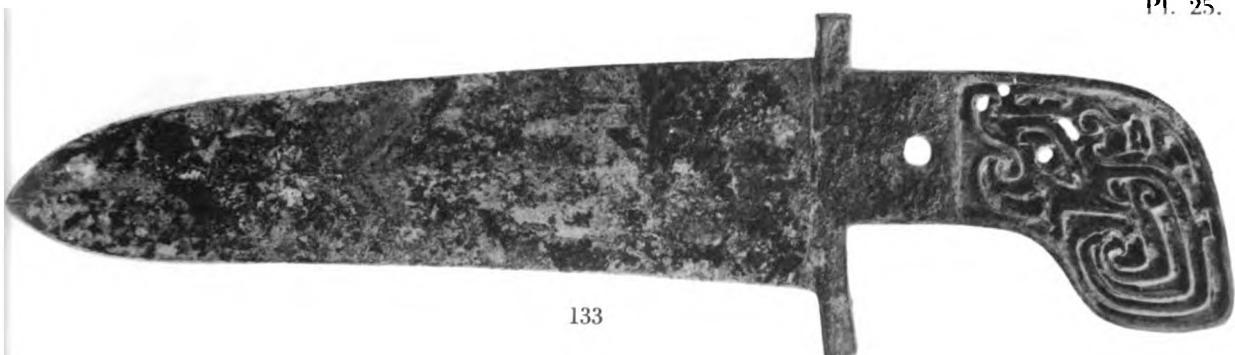
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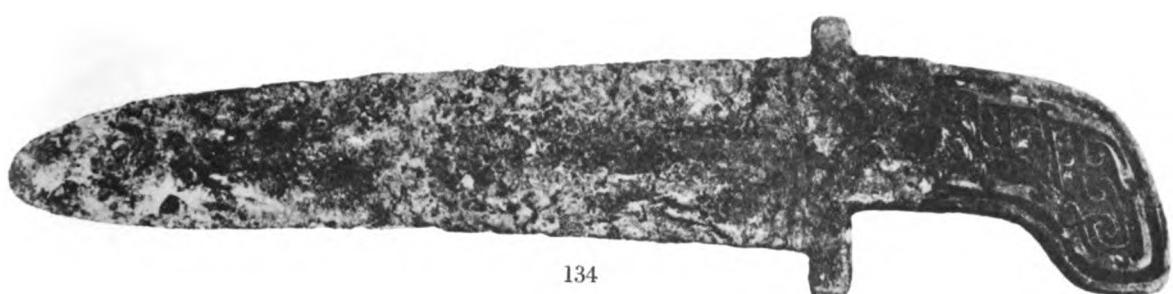
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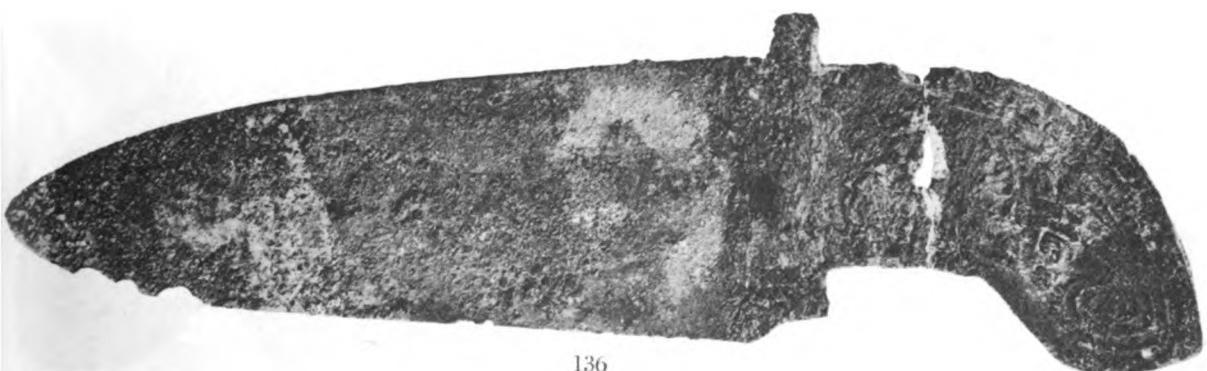
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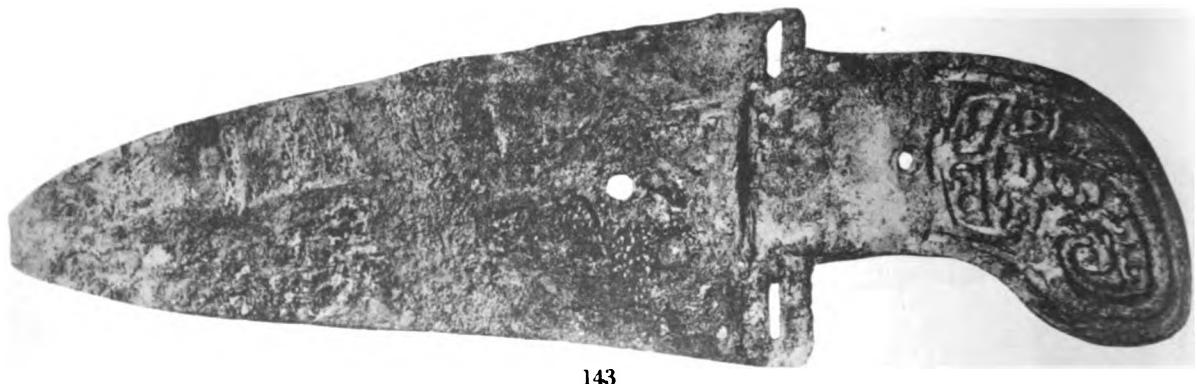
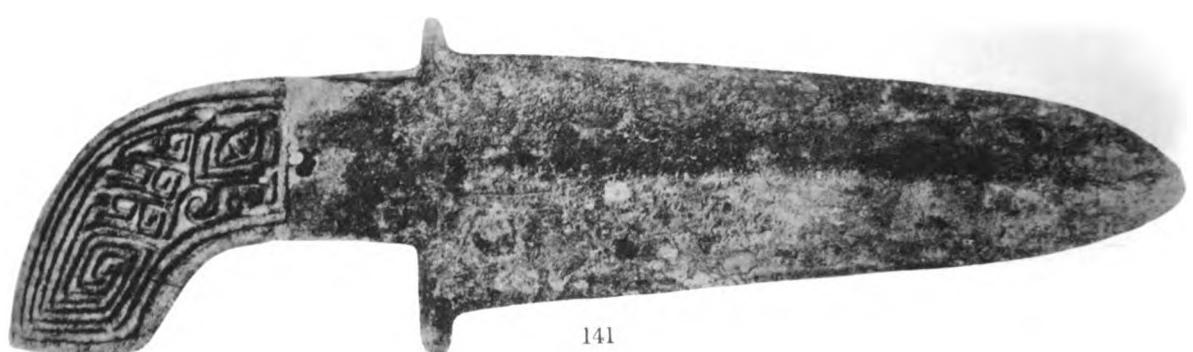
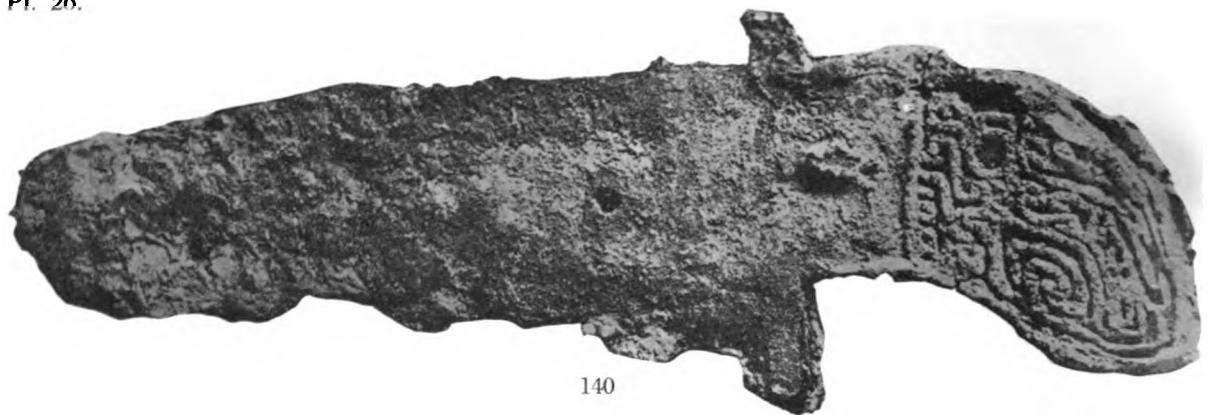
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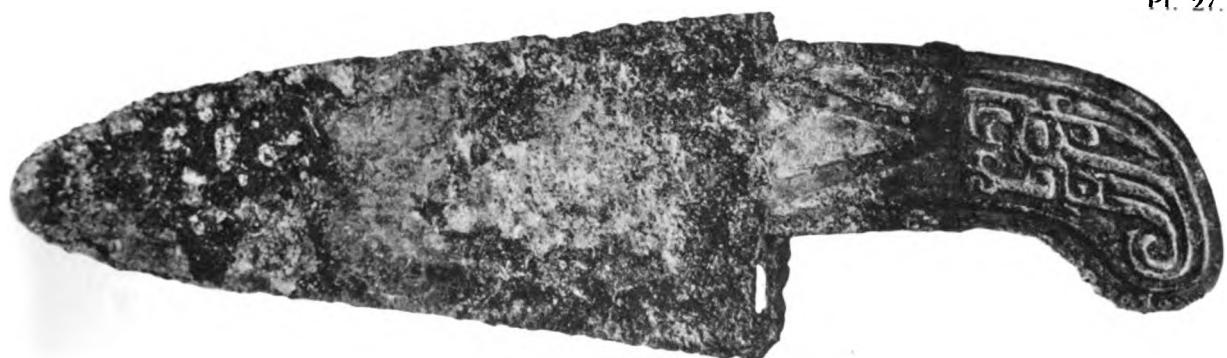


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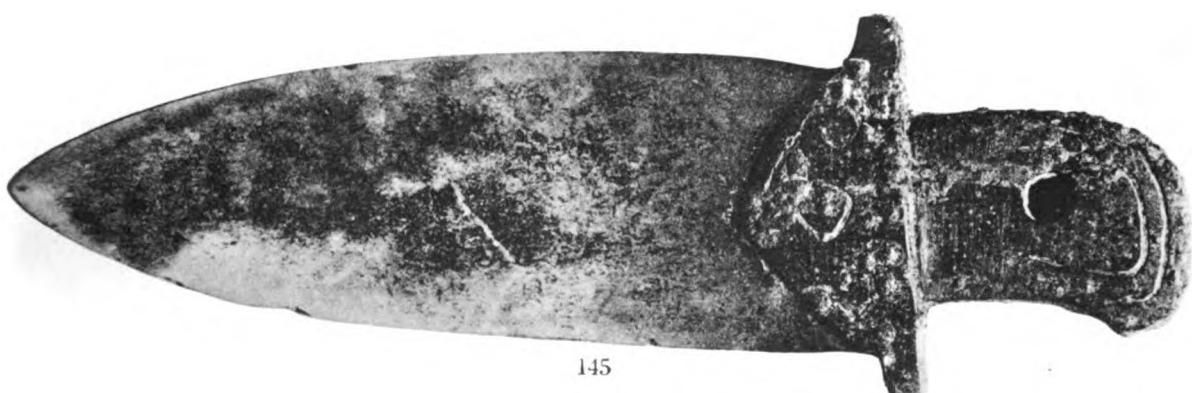


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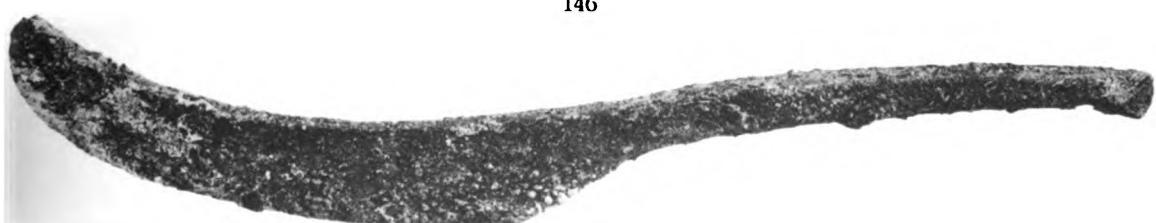
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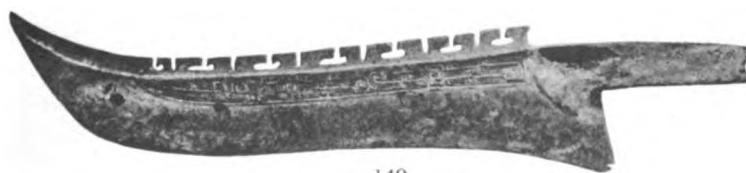
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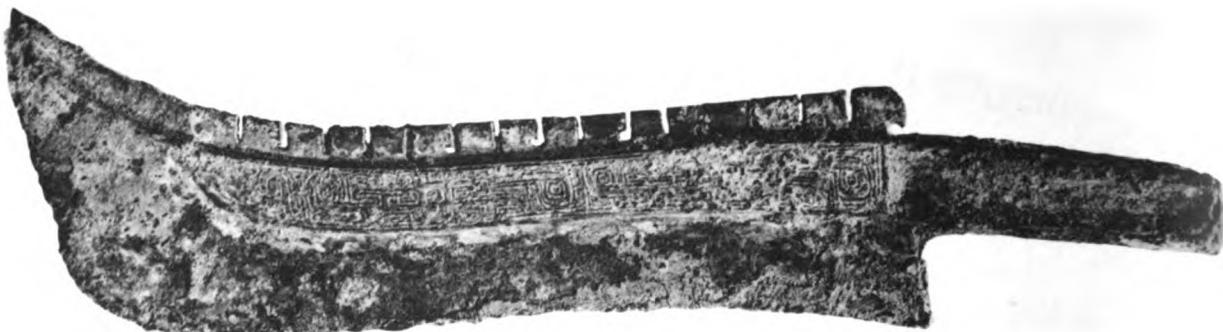
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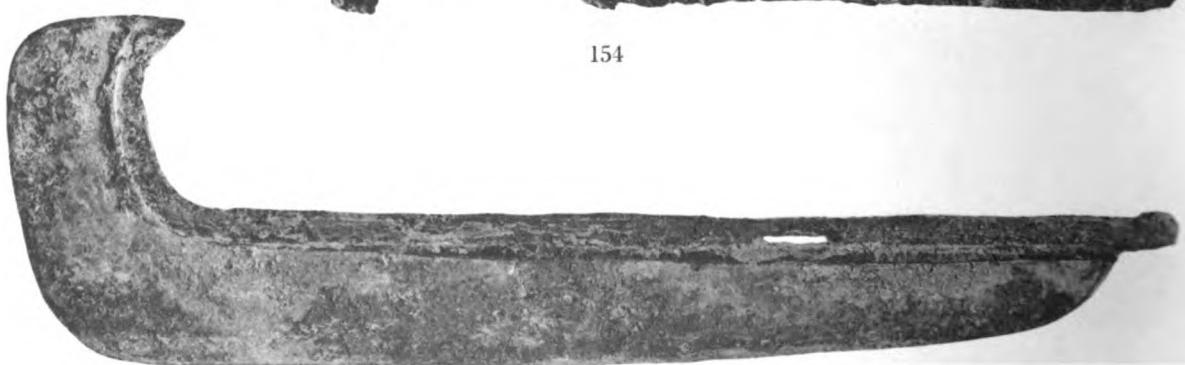
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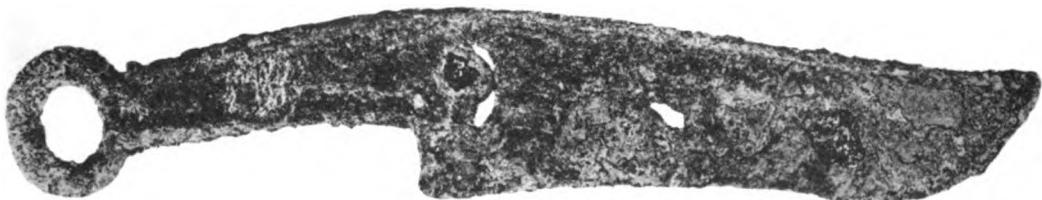
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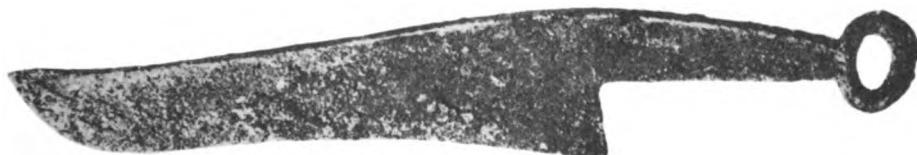
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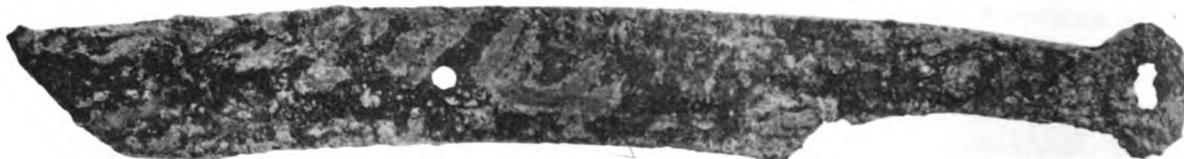
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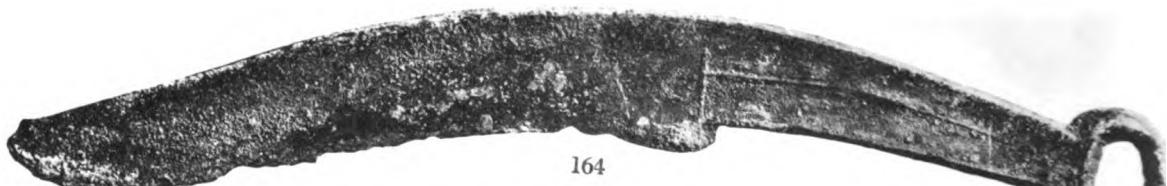
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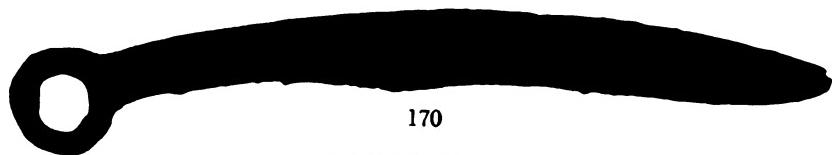
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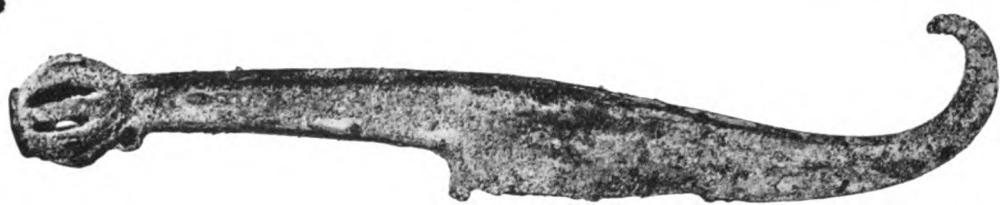
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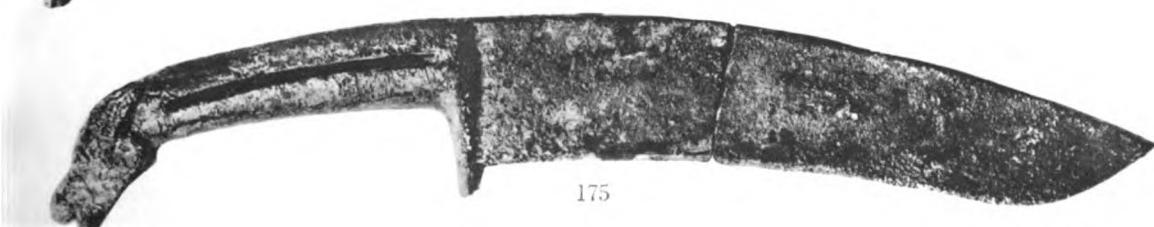
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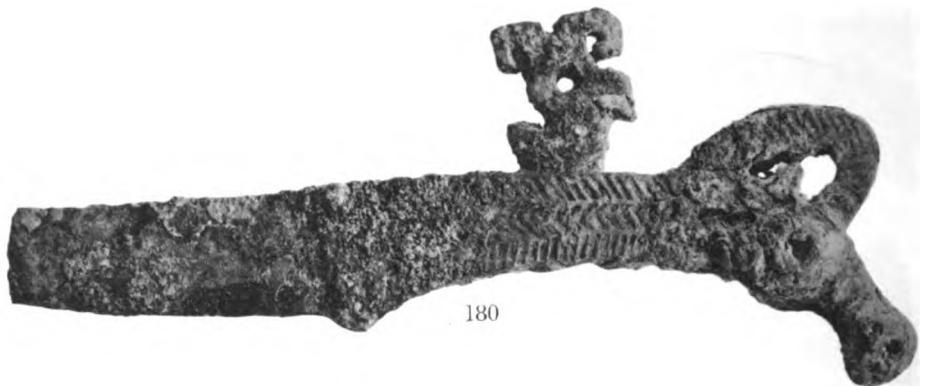
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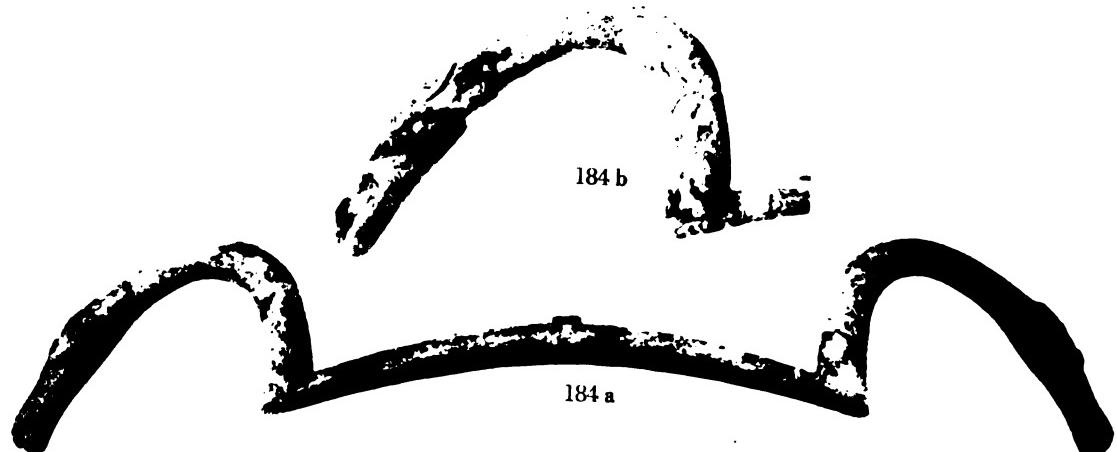
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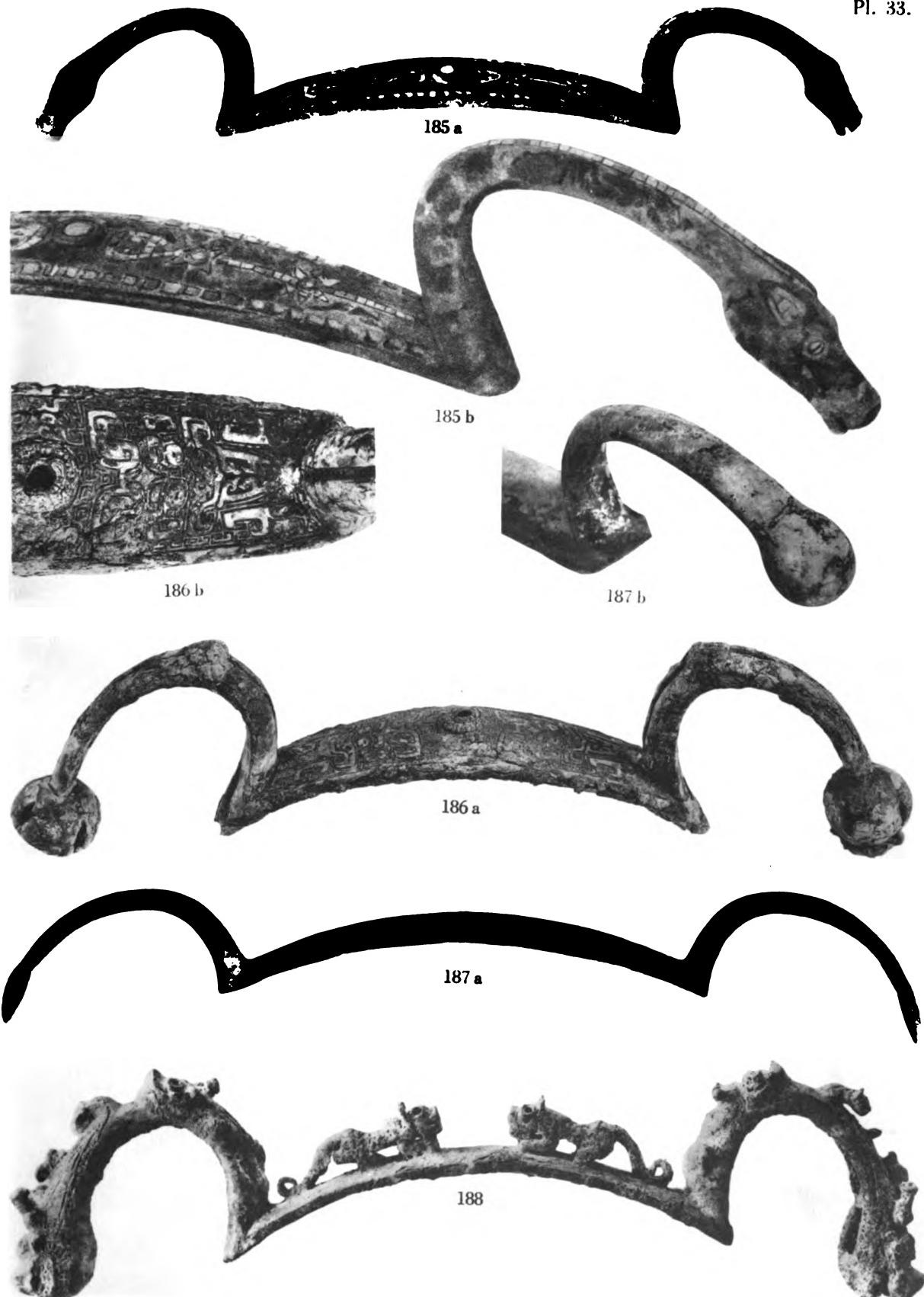


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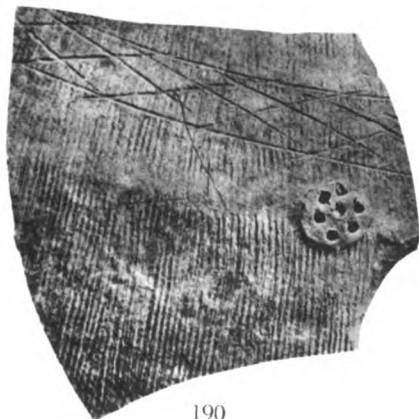
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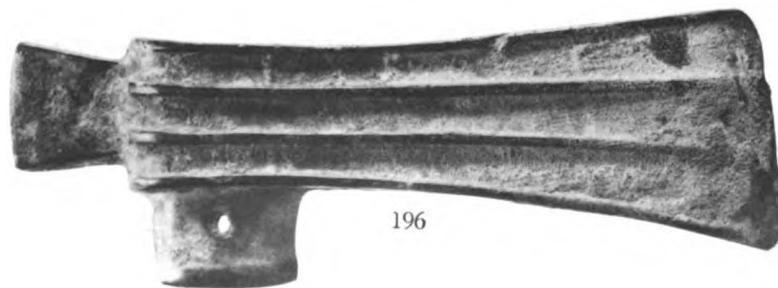
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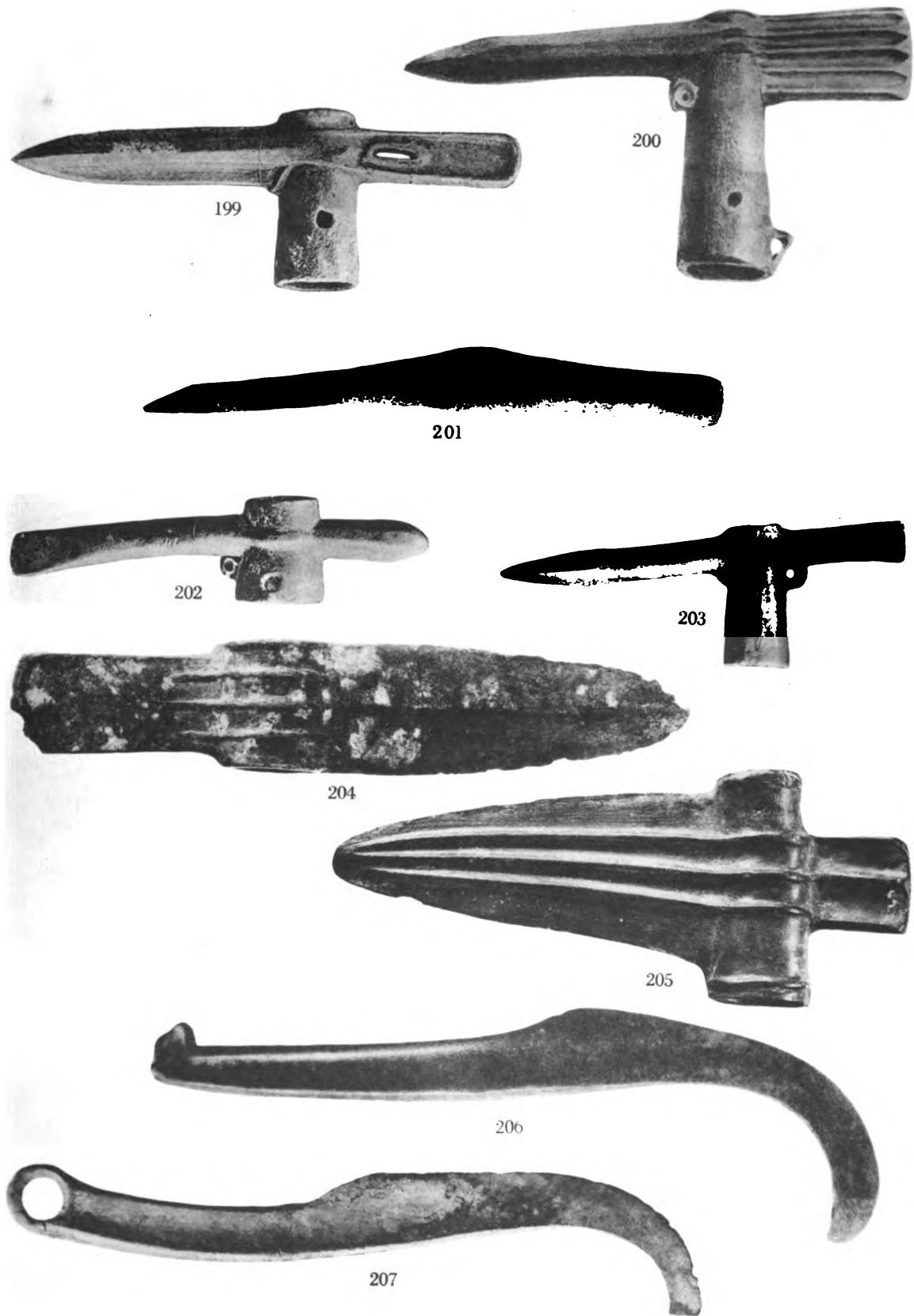
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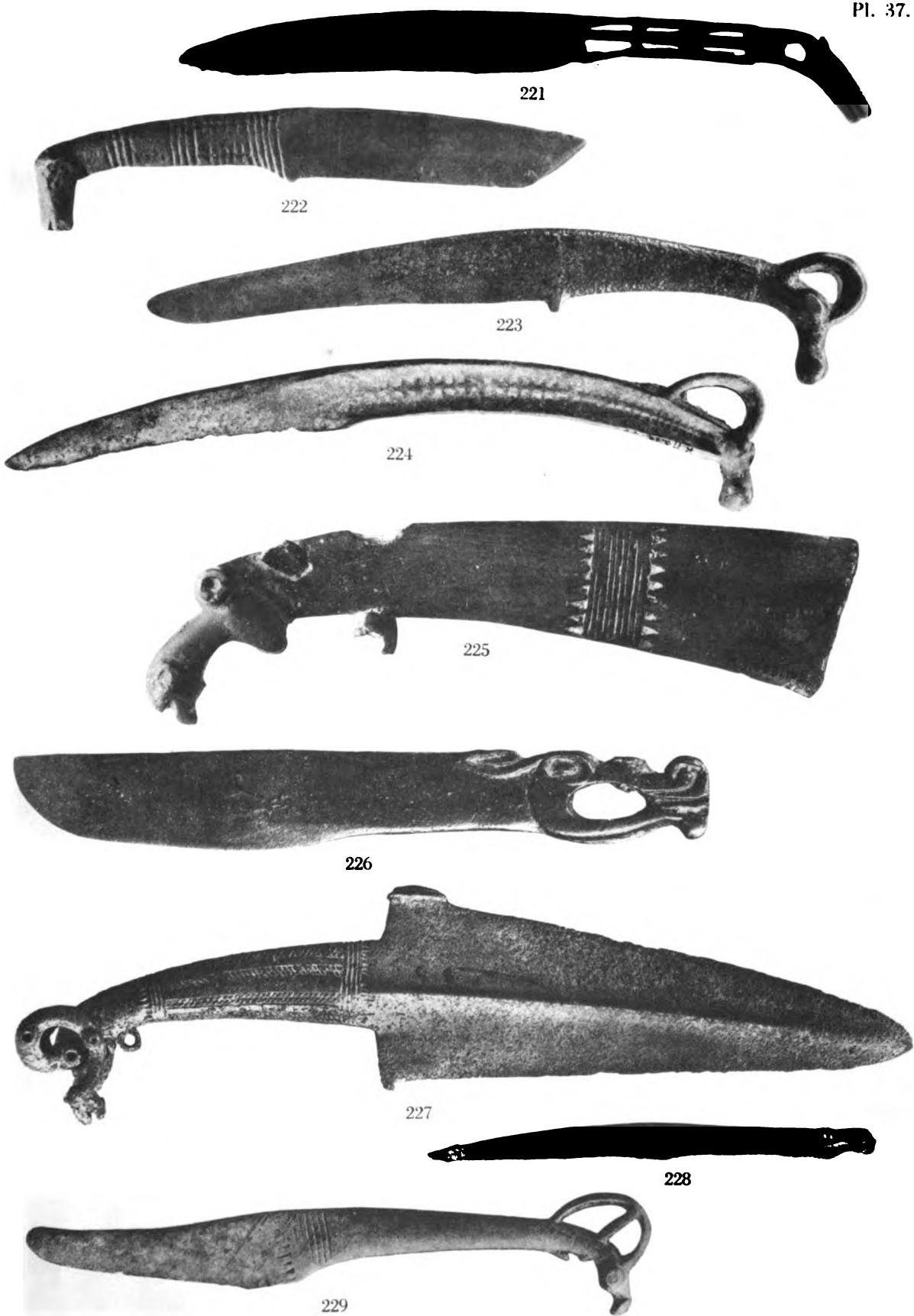
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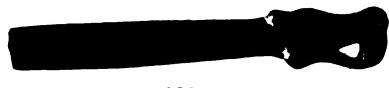


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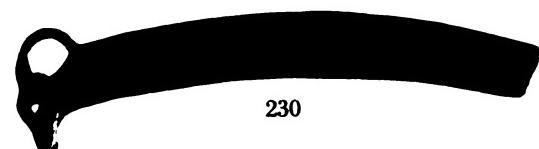




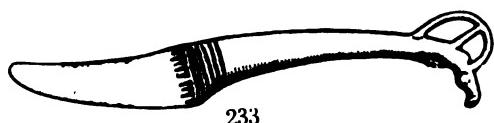




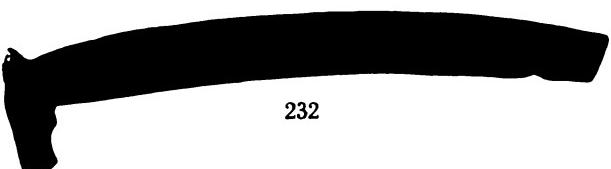
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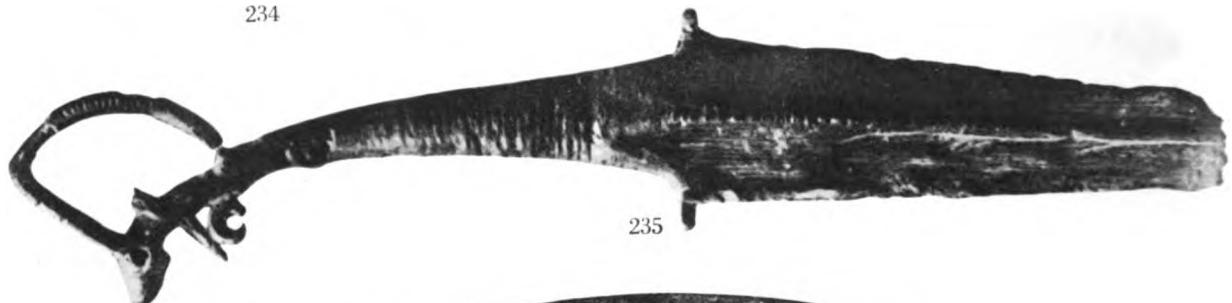
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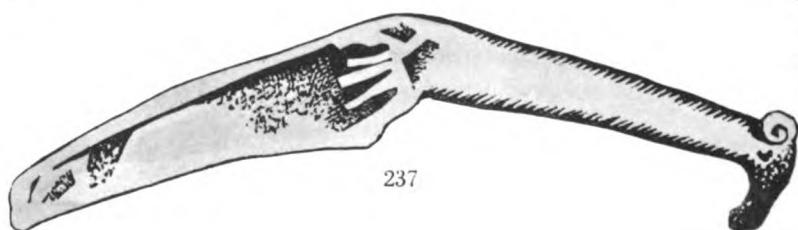
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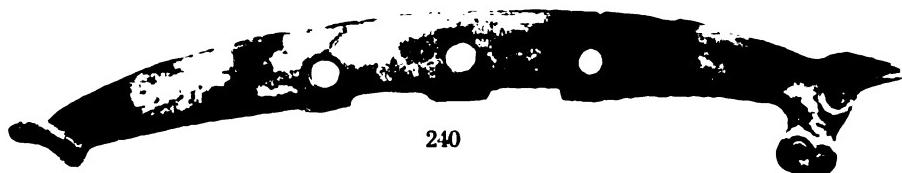
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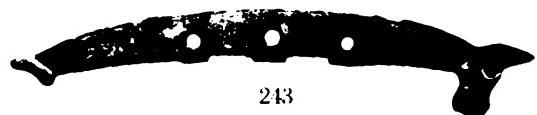
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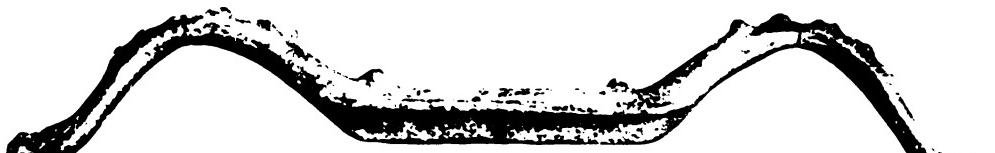
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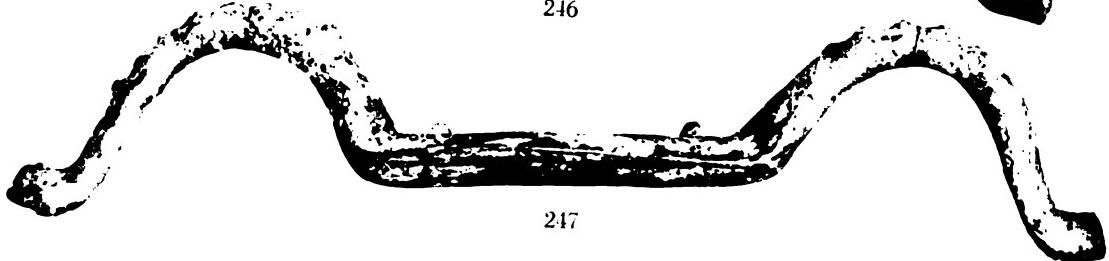
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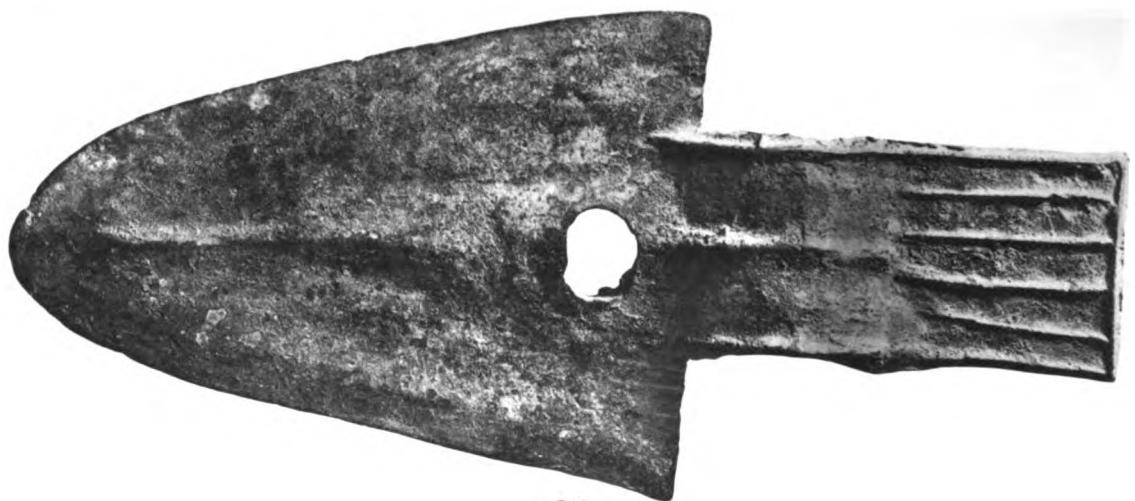
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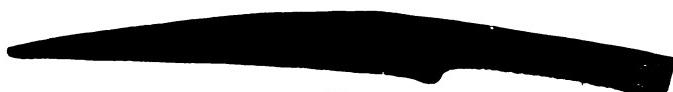
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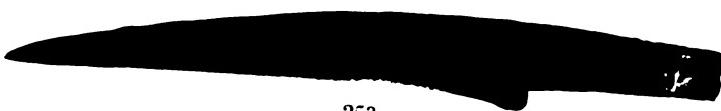
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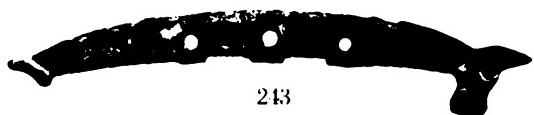
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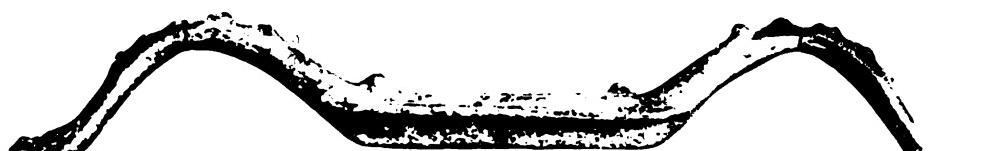
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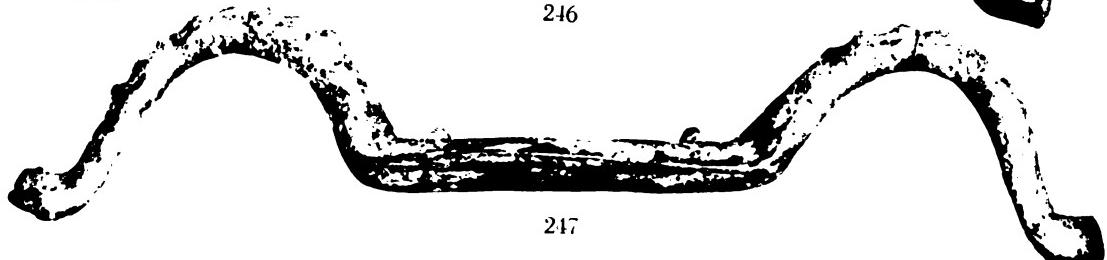
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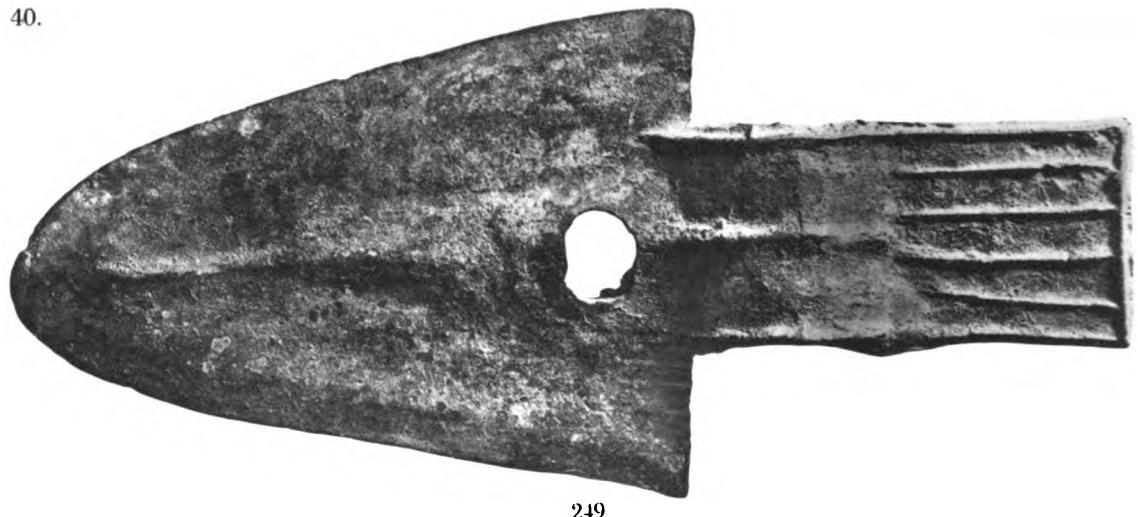
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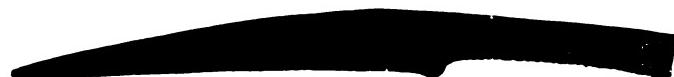
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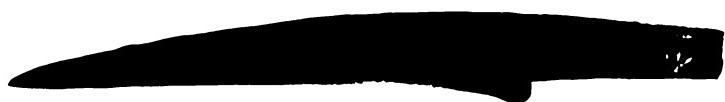
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